



COUNTY COUNCIL OF THE COUNTY OF LANARK

---

# ANNUAL REPORTS

OF THE

COUNTY MEDICAL OFFICER  
OF HEALTH

AND THE

COUNTY SANITARY INSPECTOR

---

FOR THE YEAR 1937

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# STAFF.

## COUNTY HEALTH DEPARTMENT.

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**County Medical Officer of Health.**

JOHN M. LANG, M.D., D.P.H.

**Deputy County Medical Officer and  
Executive School Medical Officer.**

JOHN MACINTYRE, M.B., Ch.B., D.P.H.

**Senior Assistant Medical Officer of Health.**

G. MACLEOD MILLAR, M.B., Ch.B., D.P.H.

**Assistant Medical Officers of Health.**

DOUGLAS BROWN, M.B., Ch.B., D.P.H.

CATHERINE B. WILSON, M.B., Ch.B., D.P.H.

LESLIE J. LANG, M.B., Ch.B., D.P.H.

ANDREW G. REEKIE, M.B., Ch.B., D.P.H.

THOMAS HUNTER, M.D., D.P.H.

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ROBT. SHIRRAH DEWAR, M.D., D.P.H.

**Bacteriologist.**

T. GOW BROWN, M.B., Ch.B., D.P.H.

**Chemist.**

WALTER BROWN, F.C.S.

**Sanitary Inspector.**

JOHN MILLAR.

**Building Inspector.**

WILLIAM MARTIN.

**Meat Inspector.**

ALFRED NIMMO.

**Senior Food and Drugs Inspector.**

CHARLES MACARA.

**Senior Rivers Inspector.**

FRANK M'ARTHUR.

**Supervisor of Nurses.**

HELEN MACGREGOR.

# COUNTY COUNCIL OF THE COUNTY OF LANARK.

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## ANNUAL REPORT.

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### INTRODUCTION.

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#### Vital Statistics.

*Population.*—The estimated population for 1937, according to the figures supplied by the Registrar-General, is as follows:—

County of Lanark (Landward),	...	...	296,405
Burgh of Biggar,	...	...	1,297
Burgh of Lanark,	...	...	6,082
			<hr/>
			303,784
			<hr/>

This is a decrease of 1,021 when compared to the figure for 1936, and is principally due to the acquisition of portions of the County by the Burghs situated in and around the County.

*Births.*—The number of births registered during the year was 5,936, giving a birth-rate of 19·54 per 1,000 of the population. The rate shows a slight increase over last year's figure, but a decrease of ·52 when compared to the average rate for the quinquennium 1931-1935.

305 births, or 5·1 per cent. were illegitimate.

*Deaths.*—The total deaths registered during the year were 3,688, being 82 more than last year. This is principally accounted for by the increase in deaths from influenza, which totalled 132 as against 58 last year. It is of interest to note that, of the 132 deaths from influenza, 105, or 80 per cent., occurred during the months of January and February. There was an increase of 45 deaths in malignant disease, and an increase of 23 deaths in other digestive diseases.

The mortality from respiratory diseases, which includes pneumonia, bronchitis and other respiratory diseases, shows a decrease of 50 compared with last year.

The only other decreases of note were a decrease of 21 deaths in whooping cough, and 15 deaths in infantile convulsions.

*Infantile Deaths.*—The total deaths from infants under 1 year numbered 421, giving an infantile mortality rate of 70·92. This is the second lowest figure ever recorded and shows a decrease of 16 compared to 1936, and 9·78 compared with the average for the quinquennium, 1931-1935.

Deaths from respiratory diseases in infants showed a decrease of 43, the saving in deaths from pneumonia amounting to 41 of these. This is generally a reflection on the low incidence of whooping cough and measles during the year, and is borne out by the fact that there was a decrease of 16 deaths from these two diseases.

The group of diseases, premature birth, injury at birth, atrophy, atelectasis and other diseases of early infancy generally associated with the neo-natal period and influenced by the standard of ante, intra, and post-natal care, shows a fall in deaths of 56. The only increases of note were congenital heart disease 12, influenza 6, and infantile diarrhoea 6, and this latter figure was probably influenced by the occurrence of epidemic dysentery which occurred in various parts of the County during the later months of the year.

*Maternity Mortality.*—It is gratifying to record a new low record in the deaths due to pregnancy and parturition. The total number of deaths 16, compares very favourably with the figure for last year 29, and with the annual average of 35 for the quinquennium, 1931-1935.

*Tuberculosis Death-Rate.*—Deaths from all forms of tuberculosis numbered 181, which is an increase of 21 over last year, 19 of which were due to the pulmonary form of the disease.

This figure, though not maintaining the usual steady fall, is considerably lower than the annual average for the quinquennium, 1931-1935, which was 204.

### **Infectious Diseases.**

The year started in the middle of a widespread but, fortunately, mild epidemic of influenza, but this subsided very rapidly later in January. There was some increase in the numbers of diphtheria cases with a proportionate number of deaths. The numbers of cases of scarlet

fever (which had dropped considerably in 1936) rose more than before, though this fortunately was accompanied by a halving of the numbers of deaths.

Of the other notifiable diseases, the numbers of cases remain almost constant, but those of enteric fever dropped considerably, and during the year not a single death was notified as due to this disease.

During the year a few cases of infective jaundice were brought to the notice of the Department. The occurrence of many cases of dysentery raised the question as to the unsuspected prevalence in the County of this disease in mild and ambulant forms. The numbers attacked by diphtheria and scarlet fever show there is no diminution of the risk in the population at large, so, as indicated in the last Annual Report, efforts were made during the year to interest the public in the modern methods of preventive medicine by utilising suitable films. Demonstration by this means of the method of preventive inoculation against scarlet fever and diphtheria were given at the Child Welfare Centres throughout the County, but these were found to give only a transient stimulus. Cards and leaflets distributed through schools provided a very gratifying response in certain districts, but most reliance is to be placed on personal contact between the parents and the health visitors. The most potent of all factors influencing demand for these preventive measures remains the mortalities resulting locally from the disease, but even this has had only a temporary effect.

### **Tuberculosis.**

During the year 528 cases were notified as suffering from tuberculosis—287 pulmonary and 241 non-pulmonary. On the register at the end of the year there were 1,732 cases—810 pulmonary and 922 non-pulmonary.

The cases notified are visited and kept under observation and an established diagnosis is obtained—if possible within three months. A recognised standard of diagnosis is obtained before the patient is kept on the register as a definite case of tuberculosis. "Suspect cases" are also observed, and may be admitted to hospital, if necessary, for a period of observation in order to arrive at an established diagnosis.

The death-rate from pulmonary tuberculosis during the year was 4.24 per 10,000 of the population. This shows an increase of 0.64 per 10,000 of the population over the previous year.

The scheme of rehousing of families affected by tuberculosis is still in operation, and during the year 22 families were rehoused under this scheme, while, in addition, 26 families in which there were cases of tuberculosis were rehoused under Decrowding and Improvement Schemes.

### **Maternity and Child Welfare.**

As required by the Maternity Services (Scotland) Act, 1937, a scheme for providing medical and midwifery services was drawn up during the year after consultation with general practitioners, nursing associations and midwives' association. The scheme was submitted to the Department of Health in November. It is hoped that within the next year final arrangements will be made and the scheme become a working reality that will prove immensely helpful in the reduction of maternal morbidity and mortality.

There has been no outstanding feature in Maternity and Child Welfare other than the above during the year.

Infantile mortality is lower—73·5 per 1,000 births as against 86·9 per 1,000 in 1936.

Maternal mortality was low in 1937, there having been 16 deaths as against 29 in 1936, and an average of  $175 \div 5 = 35$  in the quinquennial period, 1931-1935.

Birth-rate was not materially altered—19·54 in 1937 and 19·36 in 1936.

A new dental clinic was established at Bellshill Out-Patient Department. It has been operative since March and has been much attended.

The County Council had under consideration the building of a new Maternity Hospital, the present building being out-of-date and too small for present requirements.

A new Health Institute at Larkhall was opened during the year and gives facilities for treatment hitherto impossible at Larkhall. An ante-natal clinic is held weekly in this as in the other health institutes of the County.

Education in mothercraft continues at the various centres and institutes, the use since August of the kodascope from Bellshill Hospital



being of great value in the showing of suitable films hired for the purpose. Since the hiring of these films proved expensive, an effort has been made by the Public Health staff to make their own films, and as a first attempt a Child Welfare film has been made and shown at the centres. It is hoped to extend this effort suitably to demonstrate the various forms of treatment open to the public of Lanarkshire.

Twelve auxiliary centres were opened in the less populated areas of the County. Ten of these have proved to be of real value and have been well attended. At two, Overtown and Calderbank, the attendance has been most disappointing. It is probable that these two centres ought to be discontinued; and it might be well to review the County rural areas with the idea of establishing other auxiliary centres elsewhere.

### **School Medical Service.**

A separate report is published giving the statistics with regard to school health administration for the year ended 31st July, 1937.

As anticipated in last year's report further progress has been made during the year in linking up the Child Welfare Scheme with the School Medical Service.

Early in the year the medical work at Cadzow Child Welfare Centre was undertaken by one of the School Medical Officers, and, as this centre was becoming badly overtaxed at the fortnightly sessions, opportunity was taken of holding it weekly. The school nurse attached to this Medical Officer undertakes part of the nursing duties. In return, one of the Public Health Department's Medical Officers undertakes school medical inspection duties one afternoon per week and a nurse assists for a similar period at a School Minor Ailments Clinic.

Soon thereafter a School Minor Ailments Clinic was inaugurated at Shotts Health Institute. There are two sessions per week—Tuesday and Friday afternoons—and the duties are carried out by the nurse in charge of the Institute. The attendances have fully justified the undertaking.

At Bishopbriggs and Chryston Child Welfare Centres—each of which is held weekly—an arrangement has been come to whereby scholars from the adjacent areas, if they attend, will be advised as to treatment of minor ailments by the Medical Officer of the Centre and will be supplied with the requisite medicaments. The numbers of children taking advantage of this provision are disappointing.

At Blantyre and Larkhall Health Institutes during the latter part of the year the artificial sun-ray apparatus has been put at the disposal of the School Medical Officers. In each institute two sessions per week are held—staffed by the School Medical Department—and considerable numbers of children are benefiting by this therapy. At Cambuslang Health Institute a few scholars have been having sun-ray treatment weekly during the latter months. This is undertaken, at the request of the Assistant School Medical Officer of the area, by the Institute nurse.

During the early summer a joint clinic for the operative treatment of tonsils and adenoids was inaugurated in Douglas Cottage Hospital. Here the collaboration is not a matter of staffing, but opportunity was taken of putting the services of the two departments on a similar basis with regard to the method of selecting cases and to scales of charges. It was important that these latter should be identical.

### **Hospital Services.**

As a result of the discussions and negotiations with the Town Councils of Coatbridge, Hamilton and Rutherglen, the County Council, in conjunction with these three authorities, have approved of the erection of a General Hospital. A site adjoining the existing Maternity Hospital at Bellshill has been selected. The hospital will consist of 312 beds divided into two blocks, one for surgical cases and the other for medical cases. In addition there will be a mental observation unit of 30 beds and a casualty observation and diagnostic unit of 20 to 30 beds. The purpose of the hospital will be to provide accommodation for the sick poor who are deemed to be in need of special hospital treatment and for the treatment of such illnesses amongst the general population as the hospital authority may accept from time to time. The hospital will be provided with adequate facilities for the investigation of diseases, including X-ray, pathological, bacteriological and bio-chemical departments. The out-patient department will take the form of a modern diagnostic centre and will deal only with special forms of treatment.

The County Council have kept before them their own requirements for a new Maternity Hospital, and have agreed that such an institution, consisting of 150 beds, will be built on the same site as the General Hospital for medical and administrative reasons. Three pavilions will be designed for lying-in cases (90 beds), one for ante-natal cases (30 beds), and one for abortions (15 beds), and isolation cases (15 beds).



The General and Maternity Hospitals are being inaugurated as the nucleus of a fully developed scheme, and arrangements will be made to meet extensions spread over a number of years.

The hospital services provided are not intended to compete with the voluntary hospitals, and negotiations are proceeding with these institutions in order that effective co-operation should be maintained.

The provision of a central Infectious Diseases Hospital, consisting of from 400 to 500 beds, has also been approved by the County Council, and negotiations are going ahead with the Lanarkshire Burghs Sanatorium Committee with regard to the purchase of a site at Muirburn, near Glassford.

The programme is a considerable one and has only been made possible by means of a grant from the Special Areas Fund towards the capital cost of the above schemes, which are estimated to cost from £853,000 to £948,000.

As a provisional measure, until the General Hospital has been provided, the County Council have agreed to the reconditioning of Omoa House to form a hospital for the treatment of the sick poor. Treatment will be given in this institution by way of the Public Assistance system with a broad interpretation of "medical relief." The Institution, when reconditioned, will provide 146 hospital beds. This will provide a much needed, although modified, hospital service for the treatment of the sick poor in anticipation of a fully developed system of hospital facilities for sick persons.

### **National Health Campaign.**

In the early autumn of the year the Department of Health for Scotland intimated that the Government proposed to start a publicity campaign, opening with a speech by the Prime Minister, and inviting local authorities to co-operate. The campaign was to be framed in broad and generous lines, including wireless talks, billposting, the distribution of handbills and pamphlets, newspaper articles, public lectures, generally advertising the various public health services available to the ratepayers and the easiest method of obtaining them.

In Lanarkshire the problem was tackled by arranging through a billposter for the outdoor display of 200 of the largest size of posters; the distribution for indoor display of 200 of medium sized posters at

child welfare centres, tuberculosis dispensaries, hospital waiting rooms and public offices ; the display of 2,000 small posters in school classrooms and shops. It was also arranged to distribute 60,000 pamphlets to school children and all attenders at clinics and out-patient departments, inquirers at hospitals, and through the medium of enclosures to all letters to the public from the various departments of the County Council for a limited period. An insertion to the pamphlet was prepared showing the services available in Lanarkshire, and where and how obtainable. Local newspapers were invited to publish articles prepared by members of the staff on such topical subjects as milk supplies ; health of mothers and children ; diabetes ; tuberculosis and suspected tuberculosis ; services for infants and pre-school children ; disinfection and bathing ; immunisation against diphtheria and scarlet fever.

In addition to the usual routine lectures given at Maternity and Child Welfare Centres, public lectures and the show of an appropriate cinema film were arranged and given, mainly on immunisation against diphtheria and scarlet fever. These were well attended and resulted in a large number of parents requesting immunisation for their children.

A ciné camera was obtained which is proving of inestimable value in taking films useful for demonstrations and lectures. Earlier in the year it had been felt that the regular showing of appropriate cinematograph films at the Child Welfare Centres would be an aid to the various educational lectures, and films were obtained for this purpose. These films, either hired from commercial firms or loaned by other local authorities, have been viewed with much favour, and I am looking forward to a broadening of interest when our own local made films can fill the bill to a greater extent.

So far two films have been completed, the first showing some aspects of the Maternity and Child Welfare Scheme and the second on the recently inaugurated scheme of " Home Helps."

### **Housing.**

Full details of the work carried out in connection with housing are given in the Report of the County Sanitary Inspector, which is printed as an Appendix to this report.

Progress in housing has been somewhat retarded during the year, by reason of difficulties which have arisen in regard to supply of material and labour—particularly bricklayers.

Generally speaking, satisfactory progress has been made with procuring sites for houses already approved, but building operations have not proceeded as speedily as was anticipated.

Alternative methods of construction have been under consideration and towards the end of the year building of a number of houses by the Whatling system of concrete construction was commenced.

The question of the erection of timber houses is still being considered.

### STATISTICS.

The **Area** of the County, inclusive of Small Burghs, was 528,572 acres, made up as follows :—Landward portion of County, 527,993 acres, Burgh of Biggar, 67 acres ; Burgh of Lanark, 507 acres.

The *density of population* was 0·57 person to the acre.

The estimated population for 1937, according to figures supplied by the Registrar-General, was as follows :—

County of Lanark (Landward),	...	...	296,405
Burgh of Biggar,	...	...	1,297
Burgh of Lanark,	...	...	6,082
<hr/>			
Total,	...	...	303,784
<hr/>			

The number of **Occupied** and **Unoccupied** Houses as given in the Valuation Roll, was 68,247 and 344 respectively inclusive of Small Burghs, made up as follows :—

	Occupied Houses.	Unoccupied Houses.
County of Lanark (Landward),	66,280	337
Burgh of Biggar, ... ..	405	1
Burgh of Lanark, ... ..	1,562	6

**Statistical Tables.**—Table A shows the birth-rate and death-rate per thousand of the population and the infantile deaths per thousand births, and Tables C show the deaths classified according to cause and age-periods.

TABLE A.—BIRTH-RATES AND DEATH-RATES PER 1,000 OF THE POPULATION. INFANTILE DEATHS PER 1,000 BIRTHS.

Year.	Births.	Birth-rate.	Net Deaths.	Death-rate.	Infants under 1 Year.	
					Deaths.	Death-rate.
1931	6,350	20·99	3,423	11·31	510	80·31
1932	6,313	20·86	3,764	12·43	573	90·76
1933	5,929	19·46	3,561	11·69	523	88·21
1934	6,078	19·92	3,514	11·51	462	76·01
1935	5,799	18·98	3,534	11·57	391	67·42
Quinquennial Average—						
1931-35	6,094	20·06	3,559	11·71	492	80·70
1936	5,902*	19·36	3,606	11·83	513	86·92
1937	5,936*	19·54	3,688	12·14	421	70·92

\* Corrected figures supplied by Registrar-General.

DEATHS IN INSTITUTIONS IN COUNTY.—719 such deaths were recorded, and 575 of these were allocated to the County.

PUBLIC INSTITUTIONS SITUATED OUTWITH THE COUNTY WHERE SOME PERSONS BELONGING TO THE COUNTY DIED AND WHOSE DEATHS ARE INCLUDED.

<i>General Hospitals.</i>		<i>Poor Law Institutions.</i>	
Glasgow Royal Infirmary,	281	41 Bothwell Road, Hamilton,	14
Glasgow Western Infirmary,	32	69 Hospital Street, Coatbridge,	1
Glasgow Victoria Infirmary,	42	Thrashbush Home, Airdrie,	2
Edinburgh Royal Infirmary,	29	Others, ... ..	24
Glasgow Sick Children's Hosp.,	6	<i>Nursing Homes,</i> ... ..	32
<i>Infectious Diseases Hospitals.</i>		<i>All other Institutions,</i> ... ..	
Ruchill Hospital, Glasgow,	2		118
Others, ... ..	2		
	<u>394</u>		<u>191</u>
TOTAL, 585,			

# COUNTY OF LANARK (Including Burghs of Biggar and Lanark).

14A

TABLE C.—Year 1937.—Deaths classified according to cause and age periods, and corrected for Institutions, &c.

Population, 303,784; Acreage, ; Registered Births, (Legitimate, M., 3,800; F., 3,669; (Legitimate, 404, (Illegitimate, M., 133; F., 122; Total, 5,734 \* Deaths under 1 year, (Legitimate, 17, (Illegitimate, 17.

Population, 508,764; Males, 254,382; Females, 254,382.				NETT DEATHS AT DIFFERENT AGE PERIODS.																								Rates per 1,000 Population.	Registered in Institutions in District.
CAUSE OF DEATH.	Registered in District.	Transferred from other Districts.	Transferred to other Districts.	Nett Deaths.	Weeks.				Months.					Years.															
					-1	1	2	3	Total -4	1	3	6	9	Total -12	1-	5-	10-	15-	25-	35-	45-	55-	65-	75 and over					
All Causes (Certified, 3,242 (Uncertified, 2	3,242	643	199	3,686	137	20	17	17	191	76	87	31	36	421	133	68	36	160	144	194	339	578	837	776	1	12-1336	719		
Typhoid Fever, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Smallpox, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Measles, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Scarlet Fever, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Whooping Cough, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Diphtheria, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Influenza, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Cerebro-Spinal Fever, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Erysipelas, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Encephalitis Lethargica, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Tetanus, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Dysentery, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Acute Infective Jaundice, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Actinomycosis, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Acute Anterior Poliomyelitis, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Pulmonary Tuberculosis, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Meningeal Tuberculosis, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Abdominal Tuberculosis, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Other Tuberculosis, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Septicæmia and Erytemia, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Measles Fever, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Malignant Disease, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Meningitis (Simple), . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Cerebral Hemorrhage, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Other Nervous Diseases, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Organic Heart Disease, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Other Circulatory Diseases, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Bronchitis, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Pneumonia (All Forms), . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Other Respiratory Diseases, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Diabetes, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Fenicious Anæmia, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Diseases of Ductless Glands, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Appendicitis, Typhilitis, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Uterine Diseases (not malignant), . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Other Digestive Diseases, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Nephritis, Bright's Disease, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Dis. of Genito-Urinary System, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Dis. of Female Genital Organs, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Puerperal Sepsis, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Diseases and Accidents of Pregnancy, &c., . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Congenital Hydrocephalus, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Congenital Heart Disease, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Other Congenital Malformations, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Infantile Convulsions, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Diarrhoea (under 2 years), . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Premature Birth, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Injury at Birth, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Atrophy, D. and M., . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Atelactasia, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Suffocation, Overlying, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Rickets, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Other Dis. of Early Infancy, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Syphilis, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Violence, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Suicide, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Other Defined Diseases, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Ill-defined Diseases, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Total, . . . . .	3,244	643	199	3,688	137	20	17	17	191	76	87	31	36	421	133	68	36	160	144	195	339	578	837	777	1	12-1402	719		

\* The corrected figure supplied by the Registrar General is 5,936.



MALIGNANT DISEASES.—The deaths falling under this heading numbered 399, as compared with 354 in the previous year. In 330 cases carcinoma was stated as the cause of death; in 11 cases sarcoma; in 9 cases epithelioma; in 49 the nature of the malignant disease was not defined. The distribution of the disease according to the organs and parts of the body affected, was as follows:—Digestive, 240; buccal cavity, 22; female genital organs, 29; breast, 31; male genito-urinary, 24; respiratory, 21; skin, 10; others, 22.



## PREVALENCE OF INFECTIOUS DISEASE.

TABLE E.—NUMBER OF CASES OF INFECTIOUS SICKNESS RECOGNISED DURING 1937 :—

<i>Notifiable Diseases.</i>					Total.	Removed to Hospital.
Anthrax,	...	...	...	...	1	1
Cerebro-Spinal Fever,	...	...	...	...	14	13
Cholera,	...	...	...	...	—	—
Continued Fever (Undulant),	...	...	...	...	3	3
Diphtheria,	...	...	...	...	798	771
Dysentery,	...	...	...	...	28	15
Encephalitis Lethargica,	...	...	...	...	10	2
Erysipelas,	...	...	...	...	267	121
Jaundice, Acute Infective,	...	...	...	...	5	1
Malaria,	...	...	...	...	1	—
Ophthalmia Neonatorum,	...	...	...	...	62	16
Plague,	...	...	...	...	—	—
Pneumonia, Acute Influenzal,	...	...	...	...	145	45
Pneumonia, Acute Primary,	...	...	...	...	1,004	546
Pneumonia (not otherwise notifiable),	...	...	...	...	13	13
Poliomyelitis, Acute Anterior,	...	...	...	...	4	4
Puerperal Fever,	...	...	...	...	45	42
Puerperal Pyrexia,	...	...	...	...	55	42
Scarlet Fever,	...	...	...	...	1,243	1,132
Smallpox,	...	...	...	...	—	—
Tetanus,	...	...	...	...	1	1
Tuberculosis—Pulmonary,	...	...	...	...	287	147
Tuberculosis—Non-Pulmonary,	...	...	...	...	241	133
Typhoid Fever,	...	...	...	...	12	11
Para-Typhoid A,	...	...	...	...	—	—
Para-Typhoid B,	...	...	...	...	3	3
Typhus Fever,	...	...	...	...	—	—
<i>Non-Notifiable Diseases.</i>						
					Total.	Removed to Hospital.
Chickenpox,	...	...	...	...	624	3
Measles,	...	...	...	...	300	3
Whooping-Cough,	...	...	...	...	489	14
Total,	...	...	...	...	5,655	3,082



**Plague, Smallpox, Typhus Fever, Glanders, Actinomycosis,  
and Cholera.**

No notification was received in respect of any of these diseases.

**Diphtheria and Membranous Croup.**

Table D1 shows the cases notified and deaths registered during the past seven years, with relative rates.

**TABLE D1.**

Year.	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
1931	951	29	3.0	3.14	0.9
1932	785	42	5.3	2.59	1.38
1933	790	49	6.2	2.59	1.61
1934	736	35	4.7	2.41	1.15
1935	663	27	4.07	2.17	0.88
<i>Quinquennial Average—</i>					
1931-35	785	36	4.58	2.58	1.18
1936	757	23	3.04	2.48	0.75
1937	798	29	3.63	2.63	0.95

After admission to hospital the diagnosis was revised in 202 cases, as follows :—Positive swab (without clinical symptoms), 56 ; sore throat, 25 ; scarlet fever, 6 ; tonsillitis (including enlarged and septic tonsils), 72 ; laryngitis, 6 ; naso-pharyngitis, 6 ; rhinitis, 13 ; measles, 3 ; pneumonia, 2 ; bronchitis, 1 ; other conditions, 12. In 38 other cases no evidence of the presence of diphtheria could be detected, and in 1 the disease was complicated with German measles.

The cases and deaths during each month and at certain age-periods are shown below :—

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Cases,	82	81	48	52	62	57	40	53	64	107	73	79	798
Deaths,	4	7	1	2	1	1	—	3	1	4	3	2	29

Ages.	—1	1-5	5-15	15-25	25-45	45-65	65+	All Ages.
Cases, ...	4	142	490	96	54	12	—	798
Deaths, ...	—	8	20	—	—	1	—	29

The number of cases removed to hospital was 771, or 96·6 per cent. of the total.

Antitoxin was administered by private practitioners to 66 cases prior to their admission to hospital, and to 15 cases which were treated at home. Twelve cases which were not removed to hospital received no serum, nor was it given to 705 cases before their admission.

During the year 748,000 units of antitoxin were supplied through police stations to medical practitioners. In addition to this, practitioners were supplied with 698,000 direct from the Public Health Department or through local dispensaries.

*Contact Carriers.*—As indicated in previous reports, the routine swabbing of home contacts of cases of diphtheria has been discontinued except in the following circumstances :—

I.—Where any of the contacts (a) handle milk or milk utensils or are engaged in food occupations; (b) follow occupations involving contact with children, *e.g.*, teachers, domestic servants, etc.

II.—Where any of the contacts give a history of recent suspicious illness.

III.—On the occurrence of a second case of diphtheria in the household.

As a result of this restriction the number of carriers discovered was reduced to 13. The temporary nature of the "Carrier" state in 12 cases is shown in the following statement, which sets forth the interval, in days, that elapsed between the first positive and the second negative swab :—

0-7	8-14	15-21	Over 21
6	4	1	1

**Scarlet Fever.**

Table D2 shows the prevalence of scarlet fever during the past seven years, with relative rates.

**TABLE D2.**

Year.	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
1931	1,607	9	0.56	5.31	0.29
1932	2,680	28	1.04	8.85	0.92
1933	2,780	23	0.82	9.12	0.75
1934	1,976	21	1.06	6.47	0.68
1935	1,118	11	0.98	3.66	0.36
<i>Quinquennial Average—</i>					
1931-35	2,032	18	0.88	6.69	0.59
1936	883	9	1.02	2.90	0.29
1937	1,243	4	0.32	4.09	0.13

The number of cases notified is greater than in the previous year but is substantially below the annual average for the 1931-1935 quinquennium. The notifications received each month averaged 104, the actual number being above the average in March, April, May, September, October, November, and December, and below the average for the five remaining months. The mortality rate was the lowest since 1930.

The predominating type of disease was mild. No common source of infection was discovered in any particular series of cases, infection being apparently conveyed by personal contact.

The number of cases removed to hospital was 1,132, or 90.6 per cent. of all the cases notified.

The age-incidence of cases and deaths was :—

	Ages.	—1	1-5	5-15	15-25	25-45	45-65	65+	All ages.
Cases,		11	395	674	98	59	6	—	1,243
Deaths, ...		1	2	—	—	—	1	—	4

*“Return” Cases.*—Fifty-seven of the cases discharged from hospital during the year were apparently still capable of carrying infection, and may have given rise to 59 “return” cases. Of the infecting cases, it was found that in 41 no departure from apparently normal health could be found, 12 had developed a nasal discharge, 3 a septic throat, and 1 suppurating wound of hand.

The interval which elapsed between the dismissal from hospital of the infecting cases and the onset of illness in the “return” cases was as follows :—

Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.
25	18	14	2

During the year it was decided that on the occurrence of a “return” case of scarlet fever nasal and throat swabs from the “infecting” case and from all household contacts who had recently suffered from sore throat should be obtained with a view to examination for the presence of haemolytic streptococcus. As a result of this procedure 27 negative swabs were obtained, 4 had an initial positive swab followed by a negative, and 1 had a persistent positive swab. The last named case was re-admitted to hospital.

*Altered Diagnoses.*—Of the 1,132 cases admitted to hospital, the diagnosis of scarlet fever was regarded as doubtful in 30 cases, while in 19 no evidence of the presence of scarlet fever could be detected. The diagnosis was revised in 74 other cases, as follows :—Sore throat, 16 ; tonsillitis, 12 ; erythema, 3 ; measles, 1 ; rhinitis, 11 ; diphtheria, 1 ; otitis media, 1 ; whooping cough, 2 ; nephritis, 1 ; other conditions, 26. In 9 cases the scarlet fever was complicated with chickenpox, and in 1 with diphtheria.

#### NOTIFICATION IN RELATION TO HOUSING ACCOMMODATION.

The following statement shows the various sizes of houses from which patients were notified :—

		1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	Over 5 Apts.	Total.
Hospital,	...	159	450	349	97	21	56	1,132
Home,	...	5	19	29	26	9	23	111
Total,	...	164	469	378	123	30	79	1,243

## Enteric Group.

Table D3 shows the prevalence of typhoid fever during the past seven years, with relative rates.

TABLE D3.

Year.	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
1931, ...	21	3	14.28	0.07	0.09
1932, ...	8	2	25.0	0.02	0.06
1933, ...	78	—	—	0.25	—
1934, ...	16	—	—	0.05	—
1935, ...	72	9	12.5	0.23	0.29
<i>Quinquennial Average—</i>					
1931-35, ...	39	3	7.69	0.12	0.09
1936, ...	44	4	9.09	0.14	0.13
1937, ...	15	—	—	0.04	—

The monthly and age-incidence of cases was as follows :—

Month—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Cases,	—	—	3	3	3	1	—	1	2	1	—	1	15
Ages.	...	—1	1.5	5-15	15-25	25-45	45-65	65+	All ages				
Cases,	...	—	1	3	3	6	2	—	15				

Fourteen cases were removed to hospital, and in 7 cases the diagnosis was found to require revision. The altered diagnoses were as follows :— Positive agglutination Para. B., 1 ; pulmonary tuberculosis, 1 ; abdominal tuberculosis, 1 ; diarrhoea, 2 ; otitis media, 1 ; streptococcal throat, 1.

## Enteric Fever in Kirklands Asylum.

A probationer nurse in the Institution, who commenced duty on 8/2/37, went home ill on 6/3/37, and was removed to hospital on 11/3/37, the diagnosis being subsequently established as enteric fever.

In the course of investigation, the following findings emerged :—

Two female patients had faeces positive for B. Typhosus.

The first case had proved dysentery (Flexner) 3 months previously. She had no clinical illness suggestive of enteric fever and the agglutination titre for B. Typhosus (1 : 200) remained fixed.

The second case, a kitchen worker, had no suggestive illness. Blood agglutination examination was not carried out as she had recently completed immunising with T.A.B. vaccine.

Both cases were removed to Hawkhead Asylum for isolation and further investigation as possible “ carriers,” there being no isolation facilities available at Kirklands.

Five cases had positive agglutination results for B. Typhosus, with no clinical illness suggestive of enteric fever and with negative faeces and urine. One of these cases, in which there was a fixed titre of 1 : 1000 for B. Typhosus, was removed to hospital for investigation. A diagnosis of pulmonary tuberculosis was subsequently established.

Inoculation with T.A.B. vaccine of all staff and patients who were fit was commenced on 25/3/37 and completed in a month. In all, 223 patients and 57 members of the staff were immunised. There were no severe reactions.

There have been no further cases or suspects.

### **Cerebro-Spinal Meningitis.**

Fourteen cases ; 6 deaths. Thirteen cases were treated in hospital. After observation the diagnosis was revised in 4 cases as follows :— Haemorrhagic meningitis, 1 ; tuberculous meningitis, 2 (fatal) ; influenza, 1.

### **Pneumonia.**

1,149 cases of pneumonia were brought to the notice of the Department, 1,063 cases being notified, and 86 discovered from the Registrars' Returns of Deaths.

591 cases, or 51·4 per cent., were removed to hospital.

Table D4 shows the prevalence of pneumonia (acute primary and influenzal) during the past seven years with relative rates. It should be remembered that deaths from influenzal pneumonia are not included in these figures :—

TABLE D4.

Year.	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
1931, ...	1,202	232	19·3	3·97	7·6
1932, ...	1,432	295	20·6	4·73	9·7
1933, ...	1,178	254	21·56	3·87	8·3
1934, ...	1,205	243	20·16	3·95	7·9
1935, ...	1,048	221	21·09	3·43	7·2
<i>Quinquennial Average—</i>					
1931-35, ...	1,213	249	20·53	3·99	8·19
1936, ...	1,107	292	26·38	3·63	9·6
1937, ...	1,149	246	21·41	3·78	8·09

*Mortality.*—The deaths due to pneumonia numbered \*246, giving a fatality-rate of 21·41 per cent., and a death-rate of 0·81 per 1,000 of the population.

The distribution of cases and deaths throughout the year is shown below :—

Month—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Spt.	Oct.	Nov.	Dec.	Total.
Cases,	235	90	88	68	86	61	47	50	56	48	113	207	1,149
Deaths,	40	25	20	17	16	15	12	12	10	12	26	41	246

\* This figure does not include 53 deaths from Influenzal Pneumonia, such deaths, in accordance with the instructions of the Registrar-General, being included in the Influenza Group.



The age-distribution of cases and deaths, together with the fatality-rate in each group, are given in the following table :—

		All ages.	—1	1-5	5-15	15-25	25-45	45-65	65 and over.
Cases	Primary, 1,004	145	264	183	94	127	102	89	
	Influenzal, 145	7	17	19	17	30	35	20	
Total, ...		1,149	152	281	202	111	157	137	109
Deaths, ...		246	54	34	7	10	32	46	63
Fatality-rate,		21.4	35.5	12.1	3.5	9.0	20.4	33.6	57.8

Of the 246 deaths from pneumonia, 46 had taken place before notification was received, 67 occurred in cases which were not notified at all, 16 were secondary pneumonias, and of the remaining 117 the following tabular statement shows the day of illness on which notification was obtained :—

Day of Illness,	1	2	3	4	5	6	7	8	9	10	11	12	Over 12	Not stated.	Total.
Fatal Cases Notified,	3	11	17	16	23	10	4	9	8	3	1	1	10	1	117

Information with reference to the day of illness on which each case was notified was recorded in 1,060 cases, as follows :—

Day of Illness, ...	1	2	3	4	5	6	7	8	9	10	11	12	Over 12	Died before Notification.
Cases Notified, ...	22	83	146	157	151	98	89	62	51	23	28	20	66	64

#### FACILITIES FOR THE TREATMENT OF PNEUMONIA.

Cases treated at home, 528 ; 122 deaths.

Cases treated in hospital, 621 ; 124 deaths.

Total cases, 1,149 ; 246 deaths.



## HOUSING CONDITIONS.

*Number of Apartments.*

			1	2	3	4	5	Over 5	Total.
Home,	...	...	90	242	116	40	20	20	528
Hospital,	...	...	125	254	133	58	14	37	621
Total,	...	...	215	496	249	98	34	57	1,149

## NURSING ATTENDANT OF CASES TREATED AT HOME.

Mother,	...	...	...	...	308
Other relative,	...	...	...	...	157
District Nurse,	...	...	...	...	34
Private Nurse,	...	...	...	...	16
Other,	...	...	...	...	13
					528

**Encephalitis Lethargica.**

Three cases were notified during the year, and 7 others were discovered in the Returns of Deaths. Two cases were admitted to hospital, where the diagnosis was revised in 1 case as diplopia. At the end of the year 45 cases were on record; 29 of these were being treated at home, while institutional treatment was being provided for the 16 others, as follows:—

Omoa House,	...	...	...	...	8
Hartwood Asylum (Certified),	...	...	...	...	3
Hartwood Asylum (Voluntary),	...	...	...	...	4
Southern General Hospital, Glasgow,	...	...	...	...	1

None of the cases notified or coming to the knowledge of the Department could be classified as acute encephalitis lethargica. Of the 7 cases discovered in the registrars' returns the duration of illness was as follows:—3 years, 2; 4 years, 1; 8 years, 1; over 10 years, 3.

The duration of illness of the case in which the diagnosis was not revised was 13 years.

### Infective Jaundice at Broomside Colliery, by Motherwell.

Notification was received on 23/3/37 from the Medical Officer of Health of the Burgh of Motherwell of Infective Jaundice having occurred among miners employed at Broomside Colliery, Motherwell, in the County area. The notification referred to two Burgh cases, S.S. and C.C., both of whom were in the Glasgow Royal Infirmary. Both men had been employed up to the time of onset of illness in the Camp Virtuewell Section of Broomside Colliery.

The pit was at once visited by the Assistant Medical Officer of Health and Sanitary Inspector of the district. The following story was then obtained :—

When the newly appointed manager commenced duty in January, 1937, he heard that there had been some jaundice during the late autumn and winter months among the men working in Camp Virtuewell Section. There were a lot of rats about in that Section, so he had used rodine (?) to exterminate them ; he did not know of any new cases since his arrival in January.

The pit employed some 540 men, of whom 15 were employed in Camp Virtuewell Section, as follows :—

Miners,	...	...	10 men.	
Brushers,	...	...	3 men.	
Machinemen,	...	...	2 men.	
Drivers,	...	...	3 men.	} Not confined to Camp Section.
Fireman,	...	...	1 man.	

Camp Virtuewell Section was at the end of a long gallery isolated from other Sections of the pit and at a depth of 90 fathoms. There were 4 or 5 disused galleries above and at one point water dripped from the roof into the Section. The Section was very damp. Pit ponies were used ; the stables were far away, near the shaft. Food for the ponies was brought down into the Section during working hours. There were rats about the stables still and in other Sections of the pit.

The men drank water from bottles filled from the main pipe supply at the pit head. There were pithead baths used by all the men.

The Section was examined and specimens were taken for examination with the following results:—

Water—2 samples,	...	...	...	} All negative.
Mud—3 samples,	...	...	...	
Earth—1 sample,	...	...	...	
Slime—1 sample,	...	...	...	
Fungus from timber—1 sample,	...			
Rats—one (1/4/37),	...	...	...	} Negative examination and guinea pig inoculation.
one (30/4/37),	...	...	...	

On 27/4/37 the Camp Virtuewell Section was closed down on account of the narrowing of the seam of coal.

The names of men who were working in the Section on 23/3/37 were obtained, also the names of those who had worked there between the end of October, 1936, and the final closing of the Section on 27/4/37, enquiry being made as to absences, reported to be due to illness.

In all 36 names were given. Of these 8 were resident in the County area, 24 in the Burgh of Motherwell, 3 in the Burgh of Hamilton, and 1 in Clackmannan. Notification of the "outside" cases was given to the Medical Officers of Health concerned suggesting the advisability of blood examinations being made even in the absence of any suspicious symptoms.

The 8 County cases were visited. Three of them were ill or had had suspicious symptoms; 5 had no history of illness.

Specimens of blood were taken from 7 of the men; the 8th man definitely refused to give a specimen. No history of illness could be obtained from the last named case. In the other 4 cases where no illness had occurred the blood was negative, while in the three cases of illness the blood showed positive agglutination reactions when tested against a culture of *Leptospira Icterohaemorrhagiae*.

The history of illness of the cases was as follows:—

*J.W.*—Worked in Camp Section only. Onset 4/1/37 with headache and vomiting which he attributed to “influenza.” Vomiting continued for approximately two weeks and during this period patient’s mother states that he had streaks of blood from his nose, although the patient denies this; no sign of jaundice at any time during illness; iritis developed at the fourth week. Patient confined to bed for 6 weeks and thereafter felt very weak. Blood agglutination positive up to 1/3,000 19/4/37.

*J.K.*—Onset 17/2/37 with nausea and a feeling of utter exhaustion followed immediately by headache and pyrexia. This continued for some days then he had a severe haemoptysis and marked albuminuria. There was no rash and no sign of jaundice at any time during the illness. In convalescence he was markedly anaemic and dyspnoeic. Urine was examined on 4 occasions after 31/3/37, and was always negative for leptospira. A guinea pig injected from the urine died and haemorrhages in the lung were found post mortem. Blood agglutination was positive up to 1/10,000 12/4/37.

*R.L.*—Sudden onset about 8/2/37 with shivering and vague pains lasting about a week. On the seventh day he had a large epistaxis. There was no rash, headache, sickness or jaundice at any time during the illness. When visited on 22/2/37 he was off work with influenza.

Blood agglutination was positive up to 1/1,000 12/4/37. It is doubtful if this should be recorded as an abortive case of infective jaundice or a coincident illness occurring in a person whose blood already agglutinated leptospirae.

*D.S.*—A positive reaction was also obtained in the case of this man. He is not included in the figure 36 referred to previously. He has been for the past 2 years employed in various Sections of Broomside Colliery, but did not work in Camp Section until after his illness. The history of illness was:—

Sudden onset about 15/2/37 with muscular pains, intense headache and high temperature followed by

extreme weakness. There was no sickness nor jaundice at any time. The illness lasted for 5 weeks and was diagnosed as influenza. Blood agglutination on 7/5/37 was positive up to 1/1,000. A further sample taken on 3/6/37 was reported positive up to 1/300, the fall in agglutination in the interval between examinations being a very strong argument in favour of this man's "influenza" having been leptospiral in origin. Yet if this be granted, S. is the only man to have been infected during this outbreak without a direct contact with Camp Section.

The dates of onset of illnesses of men from all areas were :—

- 21/10/36—Burgh case—W. G.
- 19/10/36—Burgh case—J. B.
- 6/12/36—Burgh case—I. S.
- 4/1/37—J. W.
- 12/1/37—Burgh case—B.
- 20/1/37—Burgh case—S. S.
- 23/1/37—T. K.—Clackmannan.
- 3/2/37—Burgh case—E. C.
- 8/2/37 (approx.)—R. L.
- 9/2/37—Burgh case—C. C.
- 17/2/37—J. K.
- About 15/2/37—D. S.
- 12/4/37—Burgh case—A. T.

It is difficult to say how long infection would have persisted in the Camp Section. The last recorded case, A. T., Motherwell Burgh, sickened on 12/4/37, and from the history of the outbreak it is probable that further cases would have arisen intermittently. The Colliery was kept under regular supervision and no further cases occurred, but the Camp Section was closed down on 27/4/37, the reason given being that it was no longer profitable to work that particular coal seam.

### **Infective Jaundice—Carnbroe Case.**

A case of infective jaundice was reported on 30/3/37, A. S. admitted to Western Infirmary, Glasgow, and there diagnosed infective jaundice ; onset 2/3/37 headache, shivering, general pains, prostration, vomiting, epistaxis, jaundice, Schauffner reaction positive 1/3000. He worked in Virgin Section of Carnbroe Colliery and a list of fellow employees was

obtained. The County cases were visited and the Burgh cases notified to the Medical Officers of Health concerned. No further cases were identified. The Section was visited and specimens obtained for examination with negative results.

### Infectious and Contagious Diseases among School Children.

During the year 3,044 cases of non-notifiable infectious diseases were notified by the Executive School Medical Officer and Head Masters, as follows:—

Measles, ... ..	300	Ringworm, ... ..	36
Whooping Cough, ...	489	Itch, ... ..	44
Scabies, ... ..	216	Impetigo, ... ..	526
Conjunctivitis, ... ..	19	German Measles, ...	12
Eczema, ... ..	1	Chickenpox, ... ..	624
Mumps, ... ..	777		

In all, 6,974 exclusion notices and clearance certificates were issued by the Department. It was not found necessary to recommend the closure of any school or department on account of infectious disease.

### Venereal Diseases.

The following statistical statement shows the numbers of fresh County cases dealt with at the various outdoor clinics. Information with regard to in-patient treatment will be found in the report for the County Hospital, Motherwell:—

Centre.	Fresh Cases.						Total Attendances of all cases.	
	Syphilis.		Gonorrhoea.		Others.			
	M.	F.	M.	F.	M.	F.	M.	F.
County Hosp.,								
Motherwell,	18	8	70	15	52	35	3,813	298
Coathill, ...	2	2	7	1	10	3	876	189
Hamilton, ...	17	5	47	10	22	6	5,006	762
Wishaw, ...	2	2	19	3	18	4	1,373	419
Total, ...	39	17	143	29	102	48	11,068	1,668
	56		172		150		12,736	
	378							

### Immunisation against Diphtheria and Scarlet Fever.

The stimulus created by cinematographic propaganda and by the distribution of leaflets in certain schools is reflected by the increased numbers who presented themselves for immunisation against diphtheria.

#### SCHICK TEST.

Clinic.	Preliminary Test.		Immunised without preliminary		Retest.	
	Positive reaction.	Negative reaction.	Positives immunised.	testing.	Positive.	Negative.
Airdrie, ...	—	1	—	1	—	—
Allanton, ...	48	18	—	—	—	—
Bellshill, ...	77	47	71	66	1	63
Blantyre, ...	59	64	59	105	7	24
Cadzow, ...	13	34	13	56	—	—
Cambuslang, ...	48	17	13	92	6	13
Carluke, ...	19	13	11	17	—	—
Carmunnock, ...	19	6	18	7	—	—
Chryston, ...	6	3	6	17	—	10
Lanark, ...	29	26	26	54	—	—
Larkhall, ...	65	38	57	195	—	3
Morningside, ...	26	40	—	—	—	—
Newmains, ...	120	101	108	159	—	—
Shotts, ...	19	20	18	63	—	35
Strathaven, ...	10	24	10	25	—	—
By general practitioners, ...	10	—	10	14	—	2
Total, ...	568	452	420	871	14	150

Number of patients under 5 years, ... 610

Number of patients 5 to 15 years, ... 1,271

Number of patients over 15 years, ... 10

Total, ... 1,891



## DICK TEST.

Clinic.	Preliminary Test.		Positives immunised.	Immunised without preliminary testing.	Retest.	
	Positive reaction.	Negative reaction.			Positive.	Negative.
Airdrie, ... ..	—	1	—	1	—	—
Bellshill, ... ..	51	73	39	—	18	32
Blantyre, ... ..	27	24	20	—	—	—
Larkhall, ... ..	7	6	7	—	—	1
Cambuslang, ... ..	18	14	12	5	—	1
Shotts, ... ..	24	39	22	1	1	10
Strathaven, ... ..	6	27	5	—	—	4
By general practitioners, ... ..	1	—	1	8	—	—
	134	184	106	15	19	48

Number of patients under 5 years, ... 98

Number of patients 5 to 15 years, ... 234

Number of patients over 15 years, ... 1

Total, ... .. 333

## Institutions.

During the year 7,903 County patients and 94 patients from areas outwith the County were admitted to the various institutions, making a total of 7,997 admissions. The reports of the respective institutions are printed separately in another section of this Report.

The following statistical tables, F (a) and (b), give detailed information with regard to the admissions:—



TABLE F.—HOSPITALS AND SANATORIA, (a) PATIENTS ADMITTED FROM COUNTY AREA.  
(Admissions as notified.)

HOSPITALS AND SANATORIA.	Cases in Hospital at the beginning of year.	Admitted during year.	Discharged.	Died.	Cases remaining in Hospital at the close of year.	Diphtheria.	Scarlet Fever.	Typhoid Fever.	Cerebro-Spinal Fever.	Puerperal Fever.	Puerperal Pyrexia.	Erysipelas.	Pneumonia.	Polymyelitis.	Pulmonary Tuberculosis.	Tuberculosis. All other forms.	Venereal Diseases.	Ophthalmia Neonatorum.	Lethalargia.	Measles.	Whooping-cough.	Continued Fever.	Chickenspox.	Dysentery.	Other Diseases.	Mothers.	Children.	Total.
Motherwell, ...	201	2,148	2,009	144	196	501	667	8	6	42	40	89	375	3	94	19	61	19	1	8	19	3	3	10	180	—	—	2,148
Lightburn, ...	60	534	489	34	71	116	256	—	1	—	—	24	129	—	—	3	—	—	—	—	2	—	—	—	3	—	—	534
Roadmeetings,	98	477	477	31	67	154	192	4	2	—	—	4	64	—	30	7	—	—	—	1	—	—	—	—	19	—	—	477
Shotts, ...	40	92	68	14	50	—	—	—	—	—	—	—	—	—	54	25	—	—	—	—	—	—	—	—	13	—	—	92
Stonehouse, ...	80	104	104	5	75	—	—	—	—	—	—	—	—	—	—	99	—	—	—	—	—	—	—	—	5	—	—	104
Longriggend, ...	47	82	86	10	33	—	—	—	—	—	—	—	—	—	47	26	—	—	—	—	—	—	—	—	9	—	—	82
Hairmyres, ...	189	112	91	28	182	—	—	—	—	—	—	—	—	—	83	28	—	—	—	—	—	—	—	—	1	—	—	112
Bellshill, ...	85	3,420	3,362	57	86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,005	1,415	3,420
Calderbank House,	33	465	457	16	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	118	347	465
Lanark, ...	12	469	465	—	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	265	204	469
TOTALS, ...	845	7,903	7,624	339	801	771	1,115	12	9	42	40	117	568	3	308	207	61	19	1	9	21	3	3	10	230	2,388	1,966	7,903

TABLE F.—HOSPITALS AND SANATORIA. (b) PATIENTS ADMITTED FROM AREAS OUTWITH THE COUNTY.

AUTHORITY.	COUNTY HOSPITAL, MOTHERWELL.					COUNTY SANATORIA.							BELLSHILL HOSPITAL.		CALDERBANK HOUSE.		LANARK HOSPITAL.		Total.		
	Diphtheria.	Scarlet Fever.	Enteric Fever.	Puerperal Fever and Pyrexia.	Pneumonia.	Tuberculosis.	All forms.	Veneral Diseases.	Other Conditions.	Shots.	Stonehouse.	Uppertown.	Hairmyres.	Dalsert.	Boardmeetings	Mothers.	Children.	Mothers.		Children.	
Airdrie, ...	...	—	—	10	—	2	1	2	—	—	—	—	—	—	—	—	—	—	—	—	15
Coatbridge, ...	...	—	—	18	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	20
Hamilton, ...	...	—	—	7	2	—	4	1	—	—	—	—	14	—	—	—	—	—	—	—	28
Motherwell and Wishaw,	—	—	—	—	—	—	12	4	—	—	—	—	—	—	—	—	—	—	—	—	16
Rutherglen, ...	...	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	2
Renfrewshire, ...	...	—	—	—	—	—	—	—	—	—	—	—	6	—	—	—	—	—	—	—	6
Clydebank, ...	...	—	—	—	—	—	—	—	—	—	—	—	6	—	—	—	—	—	—	—	6
Military, ...	...	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Totals, ...	...	—	—	35	3	2	19	7	—	—	—	—	28	—	—	—	—	—	—	—	94

## DIABETES.

Deaths from diabetes numbered 55.

The following table classifies the deaths according to age and sex groups :—

	1-5	5-10	10-15	15-25	25-35	35-45	45-55	55-65	65-75	75+	Total.
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.
1931, ...	— —	— —	— —	1 1	2 2	— 2	— 3	3 15	5 8	2 2	13 31
1932, ...	— —	— —	— —	— 1	1 3	— —	3 3	2 12	4 7	— —	10 26
1933, ...	— —	— —	1 1	1 —	1 1	— 1	2 —	4 5	4 9	2 1	15 18
1934, ...	— —	— —	— —	1 —	3 2	1 —	— 5	2 12	4 10	— 4	11 33
1935, ...	— —	— —	— —	1 2	2 —	1 1	2 2	4 10	7 11	1 5	18 31
1936, ...	— —	— —	— 1	1 —	— —	— 6	— 5	1 14	5 7	3 4	10 37
1937, ...	1 —	— —	— —	1 —	2 1	— 2	1 4	4 16	3 15	1 4	13 42

In 6 of the cases which died during the year insulin was being supplied by the Local Authority. As far as the other fatal cases are concerned, it was ascertained that, in 9 instances, insulin was being supplied privately or through the County Insurance Committee. No insulin had been given in 33 cases, including 6 in which this form of treatment had been refused by patient, and a similar number in which insulin was not indicated. No information could be obtained in 7 cases.

The duration of insulin treatment in the 15 cases referred to above was as follows :—1-2 weeks, 2 ; 1-3 months, 3 ; 1-2 years, 3 ; 2-5 years, 2 ; 5-10 years, 1 ; 10-15 years 2 ; “several years,” 1 ; “very intermittently,” 1.

In 25 cases the diabetes was complicated with other conditions as follows :—Gangrene, 6 ; cardiac disease, 6 ; carbuncle, 2 ; nephritis, 2 ; pneumonia, 2 ; other conditions, 7.

Under the scheme originally established by the County Council of Lanark, in accordance with the provisions of the Public Health (Scotland) (Amendment) Act, 1925, assistance of various kinds has been given to diabetics. This assistance to necessitous cases was in the form of insulin, syringes and nourishment under specified conditions. There

was no special centre for the periodic assessment of the medical progress of each case, and, as many cases were not under regular medical supervision, this lack has been remedied in the past year by the establishment of a clinic held twice weekly at the County Hospital, Motherwell. Advantage was taken of this opportunity to enlarge and make fuller provision for the supervision of sufferers from diabetes and already gratifying results are recorded.

It was found that, while the majority of patients had had the initial dosage of insulin accurately determined at a general hospital clinic, there was no satisfactory means of adjustment of treatment at regular later stages. It was also a common finding that the appropriate diets prescribed were receiving inadequate attention from lack of knowledge, variety and supervision. All these points were considered and a general scheme formed which can be summed up as follows:—

*Diabetes Clinic.*—The Clinic is held at the Gatehouse of the County Hospital, Motherwell, every Monday and Thursday at 1.30 p.m. All cases and suspected cases of diabetes in the County can be examined and investigated on a scientific basis, and provision is made for supervision there frequently until a stabilised state is obtained. Patients are referred to the Clinic by their private practitioners' notifying the Medical Officer of Health and thus overcrowding at the sessions is avoided.

*Control.*—The services of Dr. Joseph Wright, who has special knowledge of diabetes, are available for all, and full advantage of his experience has had desirable results which mere statistics are unable to indicate. The educational side is not neglected, and information about dietetics, insulin injections, etc., ensure the co-operation of the patient—a most helpful aid in the amelioration of the condition.

Assisting him at the Clinic is a nurse who has had previous experience in the disease and who devotes her whole time to the supervision of the patients and their diets, both there and in their homes. There is thus close co-ordination in the assessment and management of the patient from the beginning.

Following the first visit to the Clinic, and at subsequent intervals, the assessment of the diet and insulin needs of the patient are noted, and this information is forwarded to the private practitioner, who can thus retain interest and control of the case while utilising the specialist services.

*Laboratory Work.*—Investigation includes the analysis of the urine at frequent intervals and its correlation to the carbohydrate in the diet. Certain cases may require investigation of the sugar content of the blood under controlled conditions, and special arrangements for this are made. If a case requires very close observation or has unusual features, admission to the County Hospital, Motherwell, can be arranged and a speedier assessment can be made.

*Assistance.*—The special features in cases of diabetes (the variations of the untreated case and the essential constant supervision, medical and dietary) render assistance necessary in certain circumstances. Besides the specialist services help may be given towards insulin and syringes, nourishment and travelling expenses.

Since insulin plays a very large part in the mitigation of the effects of the disease it was felt that a very generous scale should be applied in order not to discourage its use in any case requiring it.

The following scale of income is used as a guide in determining whether applicants should be asked to pay the whole or part of the cost of insulin supplied by the Public Health Department :—

	Total weekly income. Minimum.	Maximum (Minimum plus 50%).
Husband and wife, ... ..	60/-	90/-
Husband and wife, and one child, ...	65/-	97/6
Husband and wife, and two children,	70/-	105/-

and so on.

Contributions by sons and daughters working and living in the family, and by lodgers, are in accordance with the conditions observed by the Public Assistance Committee. If the weekly income is less than the scale minimum, no charge is made ; if over the maximum, insulin is purchased from the Public Health Department at cost price ; if between minimum and maximum, half the cost is charged.

Before any charge is made all the circumstances of the case are taken into consideration in order that no payment requested could possibly be a deterrent to the continued use of insulin by the patient.

Syringes suitably graduated for the more common doses of insulin are also available, and, when broken, can be replaced on payment of a small sum. Scales can be provided for the accurate weighing of the various foodstuffs in the diet, the cost of these being recovered from patients if necessary in small instalments.

STANDARD SCALE (IN SHILLINGS).

CHILDREN.													
		0	1	2	3	4	5	6	7	8	9	10	11
	1, ...	15	18	21	24	27	30	33	36	39	42	45	48
	2 ...	26	29	32	35	38	41	44	47	50	53	56	—
A	3, ...	32	35	38	41	44	47	50	53	56	59	—	—
D	4 ...	38	41	44	47	50	53	56	59	62	—	—	—
U	5, ...	44	47	50	53	56	59	62	65	—	—	—	—
L	6, ...	50	53	56	59	62	65	68	—	—	—	—	—
T	7, ...	56	59	62	65	68	71	—	—	—	—	—	—
S	8, ...	62	65	68	71	74	—	—	—	—	—	—	—
	9, ...	68	71	74	77	—	—	—	—	—	—	—	—
	10, ...	74	77	80	—	—	—	—	—	—	—	—	—
	11, ...	80	83	—	—	—	—	—	—	—	—	—	—

Nourishment, in the form of the common articles of food, is provided on a scale based on the standard or current able-bodied poor scale. Calculations on the prescribed diets show that the substitution of the more expensive proteins and fats for the cheaper carbohydrates means more expense for a similarly nourishing diet when compared with that of a normal person.

The granting of assistance, however, is conditional on the patient's keeping under medical supervision, on adhering to instructions, especially as relating to diet, and on visiting the clinic for reassessment when required.

Additional nourishment is given as far as possible in the form of articles on the diet sheet (supplied at the Clinic) which are most likely to be used only by the patient and unlikely to be bought by him without such assistance. These patients are kept under regular supervision by the Health Visitor, the family income verified each month, and the renewal of the grant authorised by the Assistant Medical Officer.



The nourishment scale is applied as follows :—

Income.					Weekly Value of Nourishment to be granted.
At Standard Scale,	...	...	...	...	3/-
Standard Scale	+1/-	...	...	...	2/6
Do.	+2/-,	...	...	...	2/-
Do.	+3/-,	...	...	...	1/6
Do.	-1/-,	...	...	...	4/-
Do.	-2/-,	...	...	...	5/-
or more. (which is the maximum allowable).					

Since patients at widely varying distances from the Clinic might require to visit regularly it was felt that, despite distance, the travelling charge to the patient should be the same for all under similar necessitous circumstances.

The travelling scale is applied as follows :—

Income.				Contribution by Patient.	Contribution by County Council.
Under Standard Scale,	...	...	...	Nil.	Total.
At	do.,	...	...	6d.	Balance.
	do.	+1/-,	...	6d.	do.
	do.	+2/- to 3/-,		1/-	do.
	do.	+4/- to 5/-,		2/-	do.

Before paying such expenses, patients are required to sign the application form and give an undertaking that the confirmatory evidence of the social circumstances, *i.e.*, pay line, parish or labour exchange card *must* be produced at the next visit to the Clinic.

The number of cases dealt with at the clinic between 5th April and the end of the year was 147, the re-attendances amounting to 732. In addition 22 cases, unable or unwilling to travel to the clinic, were visited periodically in their own homes by the clinic nurse. Five of the



clinic patients and 3 of the domiciliary cases died during the year, leaving 161 cases under observation at the close of the year :—

*Age and sex of the patients—*

Years.								
5-10	10-15	15-25	25-35	35-45	45-55	55-65	Over 65	Total.
M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.
1 1	4 1	3 1	5 7	7 7	4 41	5 50	2 30	31 138
								169

*Duration of illness (in years)—*

Years.								
		-1	1-2	2-3	3-4	4-5	Over 5	Total.
Clinic Cases, ...	...	26	16	20	15	15	55	147
Domiciliary Cases, ...	...	2	1	5	—	2	12	22
Total, ...	...	28	17	25	15	17	67	169

104 patients were supplied with insulin by the Department, and 12 received supplies from other sources. In addition, 31 patients were supplied with some form of additional nourishment from the Department, 19 of these being also in receipt of insulin from the same source, and 12 from other sources.

*Daily Dose of Insulin—*

Units.								
		-10	10-20	20-30	30-40	40-50	50-60	Over 60 Total.
Clinic Cases, ...	...	8	19	18	14	16	7	7 89
Domiciliary Cases, ...	...	—	7	2	1	4	—	1 15
Total, ...	...	8	26	20	15	20	7	8 104

## TUBERCULOSIS.

Table showing for pulmonary and non-pulmonary tuberculosis the average annual number of cases notified, cases remaining on register and death-rates per 1,000 of the population for quinquennial periods 1921-1935, and for the years 1936 and 1937 :—

Period.	Notified.		Remaining on Register.		Death-Rates per 1,000 Population.	
	Pul.	Non-Pul.	Pul.	Non-Pul.	Pul.	Non-Pul.
1921-1925, ...	490	551	1,317	1,534	·594	·440
1926-1930, ...	435	441	1,480	1,711	·532	·288
1931-1935, ...	345	314	995	1,225	·456	·215
1936, ...	281	285	789	956	·360	·164
1937, ...	287	241	795	904	·424	·171

The deaths are classified according to age in Tables C.

The following table shows the number of persons who died from tuberculosis, with particulars as to the period elapsing between notification and death, and the number of tuberculosis cases who died from causes other than tuberculosis :—

	Pulmonary.	Non-Pulmonary.
Not notified or notified only at or after death, ... ..	30	24
Notified less than 1 month before death,	8	14
Notified from 1-6 months before death,	23	3
Notified from 6-12 months before death,	12	4
Notified over 1 year before death, ...	56	7
Number of persons who died from Tuberculosis, ... ..	129	52
Number of persons suffering from Tuberculosis, who died from other causes, ... ..	24	20
Total deaths of Tuberculosis cases,	153	72

Five pulmonary and 2 non-pulmonary cases died within 28 days of discharge from sanatorium, and 33 pulmonary and 2 non-pulmonary cases died more than 28 days after discharge from sanatorium.

**New Cases.**—The following shows the new cases brought to notice during the year :—

	Pulmonary.	Non-Pulmonary.
New cases notified, ... ..	212	160
New cases not notified, ... ..	75	81
	<u>287</u>	<u>241</u>

The cases *not notified* were brought to the notice of the Department through the Registrars' Death Returns, Dispensaries, or the Tuberculosis Officers.

Of the 528 new cases notified, *i.e.*, 287 pulmonary and 241 non-pulmonary forms of the disease, 280 or 53 per cent. were admitted to Sanatoria for treatment.

The *distribution* of cases according to District Council Areas is given in Table E.

The *age incidence* of new cases was as follows :—

#### PULMONARY.

	0-5	5-10	10-15	15-25	25-35	35-45	45-65	65 and over.	Total.
Males,	1	6	8	47	27	21	33	2	145
Females,	1	1	13	57	33	17	17	3	142

} 287

#### NON-PULMONARY.

	0-5	5-10	10-15	15-25	25-35	35-45	45-65	65 and over.	Total.
Males,	35	23	15	19	10	5	2	4	113
Females,	27	26	11	35	9	8	9	3	128

} 241

The *types* of the 241 new cases of *non-pulmonary tuberculosis* are classified in the following statement according to the localisation of the principal lesion present at the time of notification :—

Superficial glands, ...	97	†Special organs, ...	10
Abdomen, ... ..	46	Skin and sub-cutaneous	
*Bones and joints, ...	55	tissue, ... ..	—
Meninges, ... ..	26	Lupus, ... ..	1
General, ... ..	6		
			<hr/> 241 <hr/> <hr/>

\* *Bones and Joints.*—*Detailed.*—Spine, 9; Hip Joint, 14; Knee Joint, 10; Ankle Joint, 5; Dactylitis, 5; Ribs, 1; Shoulder, 1; Sacro-iliac, 1; Sternum, 1; Jaw bone, 1; Metatarsal, 1; Tarsal, 1; Tibia, 3; Humerus, 1; Fibula, 1.

† Epididymus, 1; Urinary tract, 6; Eyes, 1; Ovary, 1; Ear, 1.

The *established diagnosis* of new cases is shown in the following tabular statement :—

	Pulmonary.	Per Cent.	Non-Pulmonary.	Per Cent.
Diagnosis of Tuberculosis confirmed, ... ..	224	78	186	77
Suspected Tuberculosis :—				
Retained on list for further observation, ... ..	5	2	1	4
Altered diagnosis, ... ..	49	17	45	18
Diagnosis not confirmed, ... ..	9	3	9	3
	<hr/> 287 <hr/>		<hr/> 241 <hr/> <hr/>	

Of the 224 pulmonary cases in which diagnosis was confirmed, 10 were under 15 years and 214 were over 15 years.

Of the 186 non-pulmonary cases in which diagnosis was confirmed, 97 were under 15 years and 89 were over 15 years.

The *confirmatory signs* in the 224 cases of verified pulmonary tuberculosis were as follows :—

Spit positive, ... ..	131
Spit negative with—	
X-ray positive and other confirmatory signs, ... ..	38
Tuberculous pleurisy, ... ..	13
Clinical examination positive. ... ..	11
Death Certificates, ... ..	31
	<hr/>
	224
	<hr/>

*Sputum examinations* were made in 218 cases, or 76 per cent. of the new cases, with positive results in 131 cases and negative results in 87 cases.

No examination of the spit was made in 69 cases, or 24 per cent. of the new cases, for the following reasons :—No spit, 37 ; died before or soon after notification, 30 ; left the district, 2.

The *housing conditions* of confirmed new cases of pulmonary tuberculosis were as follows :—

	1 Apt.	2 Apts.	3 Apts.	4 Apts.	Over 4 Apts.
Total Cases, ... ..	18	65	67	31	20
Bed to Self, ... ..	—	19	10	3	1
Room to Self, ... ..	1	18	30	22	15
Total number of Contacts, ...	48	258	300	117	75
Number of Contacts under 5 years of age, ... ..	19	16	21	11	3
Number who received In-patient treatment, ... ..	13	43	45	17	10
Number who died, ... ..	7	11	12	8	5

The number of cases confirmed for pulmonary tuberculosis was 224 ; the above table shows 201, the remaining 22 being institutional cases, and 1 case where information was refused.

### Rehousing of Affected Families.

The scheme for rehousing families affected by tuberculosis as referred to in the previous report is progressing favourably. Most of the houses allocated have been to families with infectious tuberculosis (Group 1). The following table shows the total number of applications dealt with classified into their respective groups and

the number of houses allocated under the three different building schemes :—

Total No. of applications, ... ..	271
No. of Group I cases, ... ..	144
No. of Group II cases, ... ..	61
No of Group III cases, ... ..	66
Total No. of houses allocated, ... ..	63
Under Subsidy Scheme, ... ..	25
Under Decrowding Scheme, ... ..	27
Under Improvement Scheme, ... ..	11

\* No. of recommendations under the Tuberculosis Scheme cancelled—35.

\* Recommendations under the Tuberculosis Scheme for the rehousing of affected families are cancelled either on account of the affected member of the household dying or the family removing from the County area.

**Cases on Record.**—There were on record at the beginning of the year 789 cases of pulmonary and 956 cases of non-pulmonary forms of the disease, and during the year 287 new cases of the former type and 241 new cases of the latter were brought to notice, giving a total of 1,076 and 1,197 cases respectively.

Of the total number of 1,076 pulmonary and 1,197 non-pulmonary cases dealt with throughout the year, the following table shows the changes which took place :—

	Pulmonary.	Non-Pulmonary.
Cases in District on 1/1/37, ...	789	956
New Cases, ... ..	287	241
Total, ... ..	1,076	1,197
Cases removed from Register—		
Died, ... ..	153	72
Disease arrested, ... ..	14	124
Diagnosis revised, ... ..	64	55
Left District, ... ..	50	42
	— 281	— 293
Cases not yet confirmed, ...	12	16
Confirmed Cases in District on 31/12/37, ... ..	783	888
Total Cases in District, ...	795	904

Statement showing the number of cases on the register in which a diagnosis of tuberculosis has been established as at 31st December, 1937 :—

		NUMBER OF CASES								Total
		Age Groups								
		5 and 10 and 15 and 25 and 35 and 45 and 65 and								
		Under 5	under 10	under 15	under 25	under 35	under 45	under 65	65 and upwards	
<hr/>										
PULMONARY.*										
A. Sputum present, ...	Males,	1	4	7	10	4	2	11	—	39
	Females,	—	1	4	18	9	2	1	—	35
Sputum present but not examined, ...	Males,	—	—	—	1	—	—	1	—	2
	Females,	—	—	—	2	—	—	3	1	6
B. Sputum examined :—										
1. Tubercle Bacilli found, ...	Males,	—	—	3	72	88	62	50	2	277
	Females,	—	—	5	94	63	25	18	2	207
2. Tubercle Bacilli never found, ...	Males,	—	—	3	27	24	26	41	5	126
	Females,	—	1	5	27	18	31	8	1	91
<hr/>										
Pulmonary Total, ...		1	6	27	251	206	148	133	11	783
<hr/>										
NON-PULMONARY.†										
1. Abdominal, ...	Males,	4	7	6	13	3	2	1	—	36
	Females,	3	7	10	14	9	4	—	—	47
2. Spine, ...	Males,	5	13	7	22	6	7	5	1	66
	Females,	4	3	9	7	13	4	6	1	47
3. Bones and Joints (exclusive of Spine), ...	Males,	14	25	21	41	14	5	14	3	137
	Females,	13	17	17	19	11	9	2	4	92
4. Superficial Glands, ...	Males,	27	46	44	34	14	8	3	1	177
	Females,	22	37	38	54	26	14	5	—	196
5. Lupus, ...	Males,	—	1	1	4	3	5	1	—	15
	Females,	—	1	5	6	4	4	1	1	22
6. Other parts or Organs, ...	Males,	1	1	3	4	7	2	6	—	24
	Females,	2	5	3	6	3	7	3	—	29
<hr/>										
Non-pulmonary Total, ...		95	163	164	224	113	71	47	11	888
<hr/>										
PULMONARY AND NON-PULMONARY TOTAL, ...		96	169	191	475	319	219	180	22	1,671

\* Persons suffering from both pulmonary and non-pulmonary tuberculosis included under "Pulmonary" only.

† Persons suffering from multiple lesions classified according to the site of the principal lesion. No case included more than once.

*Note.*—A patient is retained on the Register in the case of pulmonary tuberculosis for at least five years, and in the case of non-pulmonary for at least three years after complete freedom from symptoms and absence of signs of tuberculosis except such as are compatible with a healed lesion or lesions.



In addition to definite pulmonary and non-pulmonary cases, another type of case is kept under observation, viz., suspects. *Suspects* are children with positive tuberculin reactions and abnormal radiological signs. Children with suspicious symptoms, who do not have these two qualifications, are not registered as suspects, but are kept under observation at the dispensaries for a period not exceeding three months.

The following statement shows that there were on the register at the beginning of the year 132 Suspects, and during the year 20 Suspects were registered, giving a total of 152 cases.

The total number of Suspects dealt with throughout the year was 152, and the following table shows the changes which took place :—

#### SUSPECTED TUBERCULOUS CASES, 1937.

					Suspects.
Cases in District, 1/1/37,	...	...	...	132	
New Cases, 1937,	...	...	...	20	
					152
Cases removed from Register :—					
Died,	...	...	...	1	
No active tuberculosis,	...	...	...	10	
Diagnosis revised,	...	...	...	13	
Left District,	...	...	...	5	
					29
Cases in District, 31/12/37,	...	...	...	123	

#### Supervision of Contacts.

For a considerable number of years lists of scholars living in direct contact with sputum positive cases of pulmonary tuberculosis have been transmitted to the School Medical Department. These lists contained no clinical data and were sent for the information

and advantage of the School Medical Officers. Many of the children named were having simultaneous medical supervision by the Tuberculosis Officers.

This double supervision of "well" contacts is unnecessary and is against the best interests of the child.

In collaboration with the Executive School Medical Officer a scheme has been prepared whereby the entire medical supervision of the "well" contacts of school age is carried out in school.

The Tuberculosis Officer carries out any investigation he thinks necessary, *e.g.*, skin testing, X-raying, etc. If the question of admission to a Sanatorium does not arise all particulars of the child (including weight, skin reactions, X-ray report) are transmitted to the School Medical Department, and it is only when the child ceases to be well that he or she is referred back to the Tuberculosis Officer for further investigation and treatment.

At the commencement of the scheme the names of 675 contacts were given to the School Medical Officer. During the remaining short period of the year no case of suspicious illness was notified back.

### X-Ray Examinations.

This type of examination has become part of the routine investigation of all cases of doubtful tuberculosis, and the extent to which the facilities at the County Hospital, Motherwell, County Orthopaedic Hospital, Stonehouse, and Hairmyres Colony, East Kilbride, are used by medical practitioners and the various dispensaries, etc., is shown in the following statement:—

Year.					Examinations.
1933,	...	...	...	...	975
1934,	...	...	...	...	1,320
1935,	...	...	...	...	1,174
1936,	...	...	...	...	883
1937,	...	...	...	...	900

Table showing in detail the sources from which recommendations for X-ray examination came :—

Public Health Office and Medical Practitioners,	318
Bellshill Dispensary, ... ..	203
Blantyre Health Institute, ... ..	75
Cambuslang Health Institute, ... ..	58
Larkhall Health Institute, ... ..	60
Shotts Health Institute, ... ..	93
Stonehouse Out-patient Clinic, ... ..	11
Others, ... ..	82

The figure showing the number of cases X-rayed for the various Hospitals and Sanatoria is given in their respective reports.

### Treatment.

*Institutional Treatment.*—The cases admitted and re-admitted to tuberculosis institutions are shown in the following table. No patient was sent to any institution outwith the County :—

		Actual Accommo- dation.	Pulmonary. First Admissions.	Re-admis- sions.	Non-pulmonary. First Admissions.	Re-admis- sions.
Sanatoria,	†Shotts,	53	40	14	16	9
	§Uppertown,	53	34	13	19	7
Orthopaedic,	*Stonehouse,	80	—	—	68	31
Colony,	‡Hairmyres,	227	50	33	15	13
(Treatment and training).						
Hospital,	Motherwell,	20	10	84	17	2
(Operative treatment and Artificial Pneumothorax).						
†	Lightburn,	—	—	—	3	—
—	Roadmeetings,	24	25	5	7	—

\* Total admissions, 104—5 being Orthopaedic cases (non-tuberculous).

† Total admissions, 92—11 being suspected cases, and 2 cases of convalescent pneumonia.

§ Total admissions, 82—9 being suspected cases.

‡ Total admissions, 112—1 being bronchiectasis (emergency).

Table showing the number of cases which received treatment under the Tuberculosis Scheme in Sanatoria or other Institutions during the year :—

			NUMBER OF PATIENTS.					In Institutions on Dec. 31.
			In Institutions on January 1.	Admitted during the year.	Dis-charged during the year.	* Died in the Institutions.		
			1	2	3	4	5	6
Pulmonary	{	†Adults	{ Males, 124	151	138	15	10	112
		Females, 55	153	123	14	7	64	
	{	Children	{ Males, 5	17	21	—	—	1
		Females, 21	11	11	1	1	19	
Non-Pulmonary	{	†Adults,	{ Males, 60	51	47	5	2	57
		Females, 30	46	37	3	3	33	
	{	Children,	{ Males, 54	64	59	4	5	50
		Females, 31	50	50	1	5	25	
Total, ... ..			380	543	486	43	33	361

\* In column 4 those who were in final residence 28 days or over.

In column 5 those who were in final residence under 28 days.

† All patients of 15 years and upwards classed as adults.

The work at the various institutions dealing with cases of tuberculosis is described by the respective Physician-Superintendents in the institutional reports.

*Domiciliary Treatment.*—Cases suitable for treatment at home, or who could not for some reason receive institutional treatment, were kept under observation by the Tuberculosis Officers and Nurses, the latter of whom paid 13,120 visits during the course of the year.

*Additional nourishment.*—This form of treatment is granted to persons suffering from tuberculosis if they have *active* disease. It is not subject to the financial conditions of the home. Extra food is given as treatment, not as a form of prevention. The treatment is reviewed month by month and patients are under the strict supervision of the Tuberculosis Officer and Nurse Health Visitor.

The nourishment generally recommended is milk, eggs, butcher-meat and butter, and the statement shows the number of cases who

received this form of treatment, the amount issued and the cost :—

	Cases.	Total Cost.
No. of cases supplied, ...	153	£868 3 11
Milk, ... ..	4092½ gallons	431 19 8
Eggs, ... ..	1,871 dozen	187 2 0
Meat, ... ..		200 13 6
Butter, ... ..	312½ lbs.	48 8 9

Twenty-one patients were supplied on loan with a single bedstead, mattress and cover, pillows, and blankets. These articles are supplied to patients where proper nursing and care can be carried out at home, and where the patients or relatives are unable to afford the necessary articles. All cases are under strict supervision by the Tuberculosis Officers and nurses, who ensure that patient has "bed to self." At the end of the year, 39 cases had bedsteads and bedding in use; 2 air beds and 8 air cushions were also supplied.

### Out-Patient Clinics and Dispensaries.

The following table shows the work done at the out-patient clinic at the County Orthopaedic Hospital, Stonehouse, also at the Health Institutes at Blantyre, Cambuslang, Larkhall and Shotts, and at the Bellshill Dispensary and Lanark sunlight treatment clinic :—

Out-Patient Clinics and Dispensaries.	New Cases.					Re-attendances.				
	Consultations.	Artificial Sunlight.	Minor Operations.	Electric Treatment.	Miscellaneous.	Consultations.	Dressings.	Artificial Sunlight.	Electric Treatment.	Miscellaneous.
Stonehouse, ...	183	18	3	3	10	337	447	2,260	245	33
Bellshill, ...	214	—	—	—	—	994	—	—	—	—
Blantyre, ...	73	17	—	—	—	379	60	446	—	—
Cambuslang, ...	65	18	1	—	—	546	295	881	—	—
*Larkhall, ...	76	21	1	—	—	434	134	438	—	—
Shotts, ...	104	12	—	—	—	397	87	488	—	—
Lanark, ...	—	16	—	—	—	—	—	331	—	—

\*\_Opened 14/6/37.

In addition to the above, 602 cases received medical comforts, *i.e.*, Cod Liver Oil, Malt and Oil, Emulsion, etc.

Many cases not notified as tuberculosis were sent to the dispensaries for consultation and observation, and the following table shows the source from which they came :—

By whom Sent.	Bellshill.	Blantyre.	Cambuslang.	Larkhall.	Shotts.	Total.	Total.
Sent by Doctors, ...	101	32	40	47	64	284	419
Sent by Public Health Staff, ...	65	23	7	10	21	126	
Sent by School Medical Department, ...	—	3	1	2	3	9	

*Ear, Nose, and Throat Clinic.*—At the 22 sessions held during the year, the first visits paid numbered 15, and the re-visits, 31. Four operations were recommended, of which 3 were performed as follows :—Tonsils and adenoids, 3. The other was refused.

Attendances at the Clinic were recommended from the following sources :—Bellshill Dispensary, 1 ; Blantyre Dispensary, 2 ; Larkhall Dispensary, 5 ; Shotts Dispensary, 2 ; Shotts Sanatorium, 4 ; Longriggend Sanatorium, 1.

*Dental Treatment.*—Table showing the number of notified cases who were recommended for treatment at Out-Patient Clinics :—

Bellshill Dispensary, ...	...	...	31
Blantyre Health Institute, ...	...	...	5
Cambuslang Health Institute, ...	...	...	7
Larkhall Dispensary, ...	...	...	5
Shotts Health Institute, ...	...	...	2

### Supply of Dentures.

In November, 1937, a scheme was approved whereby definitely established cases of tuberculosis undergoing sanatorium treatment

could be supplied with dentures provided the Superintendent of the Institution was satisfied they were required on medical grounds.

Where patients are insured persons, application is made directly to the Approved Society, but should the application for any sufficient reason be refused, dentures will be supplied under the Tuberculosis Scheme in accordance with the scale already in operation for other dental work.

The number of recommendations made since the adoption of the scheme was 4, and 1 upper and 3 upper and lower sets were supplied.

### **Silicosis and Asbestosis (Medical Arrangements) Scheme, 1931, and Amendment Scheme, 1934.**

No initial examinations in connection with the above scheme were carried out during the year.

### **TUBERCULOSIS. Clinics and Dispensaries.**

#### *Health Institutes.*

Victoria Street, Blantyre.	Mondays and Fridays, Tuesdays, (Dressings done daily as required).	10 a.m. 10 a.m.	Light Treatment. Advice and Treatment.
Johnson Drive, Cambuslang.	Tuesdays and Fridays, Mondays, (Dressings done daily as required).	9 a.m. 10 a.m.	Light Treatment. Advice and Treatment.
Low Pleasance, Larkhall.	Mondays, Tuesdays, Thursdays and Fridays, Fridays, (Dressings done daily as required).	10.30 a.m. 3.30 p.m. 10 a.m.	Light Treatment. Light Treatment. Advice and Treatment.
Station Road, Shotts.	Thursdays, Fridays, (Dressings done daily as required).	10 a.m. 9 a.m.	Advice and Treatment. Light Treatment.

#### *Dispensary.*

96 Main Street, Bellshill,	Wednesdays and Fridays,	10 a.m.	Advice and Treatment.
Community Service Centre, Bellshill Road, Uddingston.	Fridays,	2 p.m.	Advice and Treatment.

#### *County Orthopaedic Hospital, Stonehouse,*

Mondays and Thursdays,	1.15 p.m.	Light Treatment.
Tuesdays,	3 p.m.	Light Treatment.
Saturdays,	10 a.m.	Light Treatment.
Mondays and Thursdays,	2 p.m.	Advice.

#### *District Offices, Hope Street, Lanark.*

Mondays and Thursdays,	9 a.m.	Light Treatment.
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## MATERNITY AND CHILD WELFARE.

**BIRTHS REGISTERED.**—The births registered (corrected for transfers) numbered 5,936—3,052 males and 2,884 females—which is equivalent to a birth-rate of 19·54 per thousand of the population. The illegitimate births numbered 305—163 males and 142 females—which is equal to 5·1 per cent. of the total births.

**BIRTHS NOTIFIED.**—The number of statutory notifications received was 5,749.

The sources of notification were as follows :—

Doctors.	Midwives.	Handywomen.	Parents.	Institutions.	Total.
1,342	2,553	17	246	1,591	5,749

In addition, 172 notifications were received as the result of letters addressed to parents ; 2 births were discovered from the Returns of the local Registrars, and 46 (including 1 still-birth) were brought to the notice of the Department by the Nurse Health Visitors, giving a gross total of 5,969. Of this figure, 5,740 were live-born children, and 229 still-born.

Table M1 shows the births registered, births notified, visits made by the Nurse Health Visitors, the attendant at confinement as ascertained at the first visit, and the infantile death-rate, the information being tabulated according to District Council Areas.

Reference to the table shows that 80,100 domiciliary visits were made by the staff during the year. The special visits referred to numbered 11,995, and were made in connection with the following conditions :—Ante-natal cases, 6,394 ; maternal and infant death enquiries, 89 ; ophthalmia neonatorum and discharging eyes, 846 ; squint, 1,327 ; puerperal fever and pyrexia, 59 ; adopted babies (first and revisits), 585 ; ear, nose, and throat, 287 ; applications for services of midwives, 59 ; enquiries regarding doctors' and midwives' accounts under the Midwives Acts, 660 ; hospital admissions, 537 ; dental enquiries, 436 ; enquiries *re* home helps, 115 ; and others, 601.

TABLE M I.

## BIRTHS REGISTERED AND NOTIFIED.

## VISITS MADE BY NURSE HEALTH VISITORS AND INFANTILE MORTALITY RATES FOR 1937.

DISTRICT COUNCIL AREA.	BIRTHS.				NUMBER OF VISITS.				ATTENDANT AT CONFINEMENT.					INFANT DEATHS.			
	Registered.		Notified.		First.	Subsequent.	Special.	Total.	Doctor alone or with Handy- woman.	Midwife.	Handy- woman.	H B A.	Insti- tution.	Regis- tered.	Rate per 1000 Births		
	Legiti- mate.	mate.	Alive.	Still- born.													
No. I, ...	95	5	100	6	101	956	2	7	1,066	9	66	—	2	24	4	40.0	
No. II, ...	265	20	284	9	280	1,941	121	302	2,644	86	97	39	—	3	55	23	80.7
No. III, ...	337	16	357	4	315	2,739	47	219	3,320	63	160	11	4	4	73	27	76.5
No. IV, ...	637	33	664	31	700	11,067	97	1,276	13,140	75	169	196	6	14	240	41	61.2
No. V, ...	448	21	472	28	487	6,044	200	1,107	7,838	26	187	131	—	6	137	31	66.1
No. VI, ...	1,197	65	1,266	53	1,312	11,681	965	3,562	17,520	25	382	521	4	36	344	90	71.3
No. VII, ...	769	26	804	27	796	9,026	794	1,411	12,027	387	122	89	8	4	186	58	72.9
No. VIII, ...	606	24	624	24	586	6,354	390	1,789	9,119	121	76	178	1	17	193	41	65.1
No. IX, ...	1,006	41	1,057	42	1,065	8,654	321	2,213	12,253	87	284	348	12	27	307	99	94.5
Biggar Burgh, ...	17	1	18	1	16	268	—	—	284	2	7	—	—	—	7	—	—
Lanark Burgh, ...	92	3	94	4	70	685	25	109	889	32	13	4	1	—	20	7	73.6
Total,	5,469	255	5,740	229	5,728	59,415	2,962	11,995	80,100	913	1,563	1,517	36	113	1,586	421	†73.5
	*5,724		5,969														

\* Not corrected for transfers.

† Calculated on the Births corrected for transfers the rate is 70.9 per 1,000 births.  
Corrected Births Registered—5,936.

ATTENDANCE AT CONFINEMENT.—Particulars connected with 5,506 live infants have been recorded. Of this number, it has been found that 887 (16·1 per cent.) were attended by medical practitioners alone or assisted by neighbours or relatives ; 1,498 (27·2 per cent.) by doctors assisted by certified midwives ; 1,492 (27·0 per cent.) by certified midwives ; 35 (0·6 per cent.) by women not on the Midwives' Roll ; 1,494 (27·1 per cent.) occurred in institutions ; and in the case of 100 (1·8 per cent.) the births took place before the arrival of an attendant.

Of the 229 still-births notified, particulars of 222 have been recorded, and the attendants at birth in these were as follows :—26 (11·7 per cent.) by doctors alone or assisted by an unqualified person ; 65 (29·2 per cent.) by doctors and midwives ; 25 (11·2 per cent.) by midwives alone ; 1 (0·4 per cent.) by handywoman ; 92 (41·4 per cent.) in institutions ; and 13 (5·8 per cent.) were born before the arrival of an attendant.

The classification of the attendants at birth is as follows :—

Cases attended by Midwives,	...	...	26·4	per cent.
Do.	Doctors and Midwives,		27·2	„
Do.	Doctors, assisted by neighbours or relatives,		15·9	„
Do.	Handywomen,	...	0·6	„
Do.	Institutions,	...	27·6	„
	B.B.A.,	...	1·9	„

FEEDING AT THE AGE OF SIX MONTHS.—5,453 records relating to infants born between July, 1936, and June, 1937, were investigated to determine the feeding at the age of six months, and the results are classified as follows :—Wholly breast-fed, 2,195 (40·2 per cent.) ; partially breast-fed, 390 (7·1 per cent.) ; artificially fed, 2,132 (39·1 per cent.) ; died or removed, 623 (11·4 per cent.) ; and information incomplete, 113 (2·1 per cent.).

#### INFANTILE MORTALITY.

The deaths of infants under the age of one year numbered 421, which is equivalent to 70·9 per 1,000 births. The infantile mortality rate in each of the District Council Areas is set forth in Table M1.

Table M II shows the deaths arranged according to group causes and age periods :—

TABLE M II.

Cause of Death.	AGE PERIOD.										Rate per 1,000 Births.
	Weeks.				Total. —4	Months.				Total. —12	
—1	1-2	2-3	3-4	1-3		3-6	6-9	9-12			
1. Prematurity, ...	75	8	3	3	89	6	1	—	—	96	16.1
Congenital Malformation, ...	10	3	5	2	20	10	2	1	1	34	5.7
Congenital Heart, ...	8	—	2	—	10	4	3	—	—	17	2.8
Atelectasis, ...	6	—	—	—	6	—	1	—	—	7	1.1
Injury at Birth, ...	8	2	—	—	10	—	—	—	—	10	1.7
2. Atrophy, Debility, and Marasmus, ...	24	2	3	2	31	6	4	1	1	43	7.2
3. Diarrhoea, ...	—	1	3	4	8	14	19	3	3	47	7.9
4. Pneumonia, ...	—	1	—	—	1	8	18	12	15	54	9.1
Bronchitis, ...	—	—	1	1	2	10	10	3	1	26	4.4
Other Respiratory Diseases, ...	—	—	—	1	1	2	—	—	—	3	0.5
5. Tuberculosis— Meningeal, ...	—	—	—	—	—	—	1	—	—	1	0.1
Abdominal, ...	—	—	—	—	—	—	—	—	—	—	—
6. Convulsions, ...	—	1	—	2	3	2	4	1	1	11	1.8
Meningitis, ...	—	1	—	1	2	1	2	1	2	8	1.3
7. Measles, ...	—	—	—	—	—	1	—	—	3	4	0.6
Whooping Cough, ...	—	—	—	—	—	5	5	—	2	12	2.0
Diphtheria, ...	—	—	—	—	—	—	—	—	—	—	—
Erysipelas, ...	—	—	—	—	—	—	—	—	—	—	—
8. Syphilis, ...	1	—	—	—	1	—	—	—	—	1	0.1
9. All Other Causes, ...	5	1	—	1	7	7	17	9	7	47	7.9
	137	20	17	17	191	76	87	31	36	421	70.9
Rate per 1,000 births. ...	23.0	3.3	2.8	2.8	32.1	12.8	14.6	5.2	6.0	70.9	

## INVESTIGATION OF MATERNAL DEATHS.

The following Table gives the Maternal Deaths arranged according to Group Causes, Number of Births, Birth-rates, and Maternal Death-rates expressed per 1,000 Births.

TABLE M III.

Registered Cause.	1936.	1937.
Puerperal Sepsis, ... ..	10	5
Albuminuria of Pregnancy and Eclampsia,	5	2
Haemorrhage, ... ..	2	1
Cardiac Failure and Shock, ... ..	5	3
Abortion, ... ..	1	—
Toxaemia of Pregnancy, ... ..	2	2
Other Diseases and Accidents of Pregnancy,	4	*3
	<u>29</u>	<u>16</u>
Registered Births, ... ..	5,902	5,936
Birth-rate, ... ..	19·36	19·54
Death-rate per 1,000 Births (Puerperal Sepsis), ... ..	1·69	0·84
Death-rate per 1,000 Births (excluding Puerperal Sepsis), ... ..	3·21	1·85
Death-rate per 1,000 Births, ... ..	4·91	2·69
*Pregnancy complicated with Oedema of Lungs,		1
Pernicious Anaemia of Pregnancy, ...		1
Cerebral Embolism, ... ..		1

## HOSPITAL TREATMENT AND MATERNAL MORTALITY.

Table M IV gives the total number of births notified, the number of institutional births and maternal deaths, and the institutional confinements and maternal mortality rates per 1,000 births :—

TABLE M IV.

	Total Births Notified.	Institution Births.	Maternal Deaths.	Institution Confinements per 1,000 Births.	Maternal Mortality per 1,000 Births.
1931, ...	6,588	900	41	136.6	6.22
1932, ...	6,534	1,262	39	192.9	5.96
1933, ...	6,214	1,302	29	209.5	4.66
1934, ...	6,333	1,516	40	239.3	6.31
1935, ...	6,137	1,516	26	247.0	4.23
1936, ...	5,992	1,458	29	243.3	4.83
1937, ...	5,969	1,591	16	266.5	2.68

## PUERPERAL FEVER AND PUERPERAL PYREXIA.

*Puerperal Fever.*—The number of notifications of puerperal fever was 45. The exact incidence of the disease may be obtained by adding to this figure 35 cases of puerperal pyrexia finally diagnosed as puerperal fever. The total number, 80, represents a rate of 13.4 per 1,000 births notified. The deaths numbered 5, giving a fatality rate of 6.2 and a death-rate of 0.8 per 1,000 births.

The following table shows the incidence and death-rates according to the attendance at confinement :—

Attendant at Birth.	Births Notified.	Total Cases of Puerperal Fever.	Rate per 1,000 Births.	No. of Deaths.	Fatality Rate.	Death- Rate per 1,000 Births.
Doctor, ...	1,202	19	15.8	—	—	—
Doctor and Midwife, ...	1,458	18	12.3	1	5.5	0.6
Midwife, ...	1,554	14	9.0	1	7.1	0.6
Institution, ...	1,591	17	10.6	2	11.7	1.2
Handywoman, ...	40	2	50.0	—	—	—
B.B.A., ...	124	5	40.3	—	—	—
Septic Abortion, ...	—	3	—	1	33.3	—
No Information, ...	—	2	—	—	—	—
Totals, ...	5,969	80	13.4	5	6.2	0.8

*Hospital Treatment.*—74, or 92·5 per cent., of the cases received hospital treatment. 72 were admitted to the County Fever Hospital, Motherwell, and 2 were treated in Robroyston Hospital, Glasgow, having been transferred to that Institution from Glasgow Royal Infirmary.

*Puerperal Pyrexia.*—The number of cases notified was 55. Of this number, 49 notifications were received from medical practitioners, and 5 from the County Hospital, Bellshill; one case was transferred from Glasgow Royal Infirmary to the County Hospital, Motherwell. Thirty-five cases were subsequently diagnosed as puerperal fever, and are included in the previous section of the report.

*Requests for Medical Consultation.*—In 8 instances medical practitioners utilised the services of the Consultant appointed by the Local Authority under the Regulations.

#### STILL-BIRTHS.

The total number of notifications of still-births received was 229 and the Nurse Health Visitors enquired into 222 of these. The attendance at confinement was as follows:—Doctor alone, or with an unqualified woman, 26; doctor and midwife, 65; midwife, 25; handy-woman, 1; B.B.A., 13; and institution cases, 92.

The confinement was ascertained to have been normal in 148 cases and abnormal in 74, instrumental delivery taking place in 49 of the latter.

In 152 instances the probable causes of the still-births are given below, but in the remaining 70 cases no definite reasons were ascertained:—Difficult labour, 16; abnormality of head, 6; hydramnios, 3; placenta praevia, 2; congenital malformation, 25; maternal ill-health, 9; ante-partum haemorrhage, 21; albuminuria and toxæmia 13; asphyxia pallida, 1; abnormalities of cord, 4; prematurity, 23; abnormal presentation, 16; accident to mother, 6; post maturity, 1; eclampsia, 6.

#### OPHTHALMIA NEONATORUM AND DISCHARGING EYES.

*Notified Cases of Ophthalmia Neonatorum.*—Cases, 62; rate per 1,000 births, 10·44; admission to hospital, 16.

Of the total cases reported, 45 (72·5 per cent.) were notified by doctors; 6 (9·6 per cent.) by certified midwives; 4 (6·4 per cent.) by both doctors and midwives; 6 (9·6 per cent.) were notified from the County Maternity Hospital, Bellshill; and 1 from Glasgow Royal Maternity Hospital.



In 29 instances a doctor alone, or with the assistance of a neighbour, was in attendance at the confinement, *i.e.*, the disease developed in connection with 3·17 per cent. of the total number of confinements conducted by doctors. Doctors and midwives were present at the birth in 5 cases, representing 0·32 per cent. of the total cases attended by doctors and midwives. A certified midwife alone was present at the birth of 14 cases, which is 0·92 per cent. of the total midwives' cases. Ten cases occurred in institutions; in 3 instances the confinements took place before the arrival of an attendant, and in 1 case the attendant was a handywoman.

In the following table the cases are classified according to the severity of the disease and to the bacteriological findings:—

	Slight.	Moderate.	Severe.	Total.
Gonococcal, ... ..	—	2	2	4
Other organisms, ... ..	4	3	2	9
Pus, but no organisms, ... ..	3	6	4	13
No pus, no bacteria, ... ..	8	2	1	11
No swab, ... ..	21	4	—	25
	36	17	9	62

*Discharging Eyes.*—The number of cases of discharging eyes discovered was 86. Six cases were admitted to the County Hospital, Motherwell. The attendant at birth was as follows:—Doctor alone, or with the assistance of a neighbour, 4; doctor and midwife, 10; midwife alone, 22; and born before the arrival of an attendant, 5. In 45 cases the births occurred in institutions.

The severity of the condition and the bacteriological findings are shown below:—

	Slight.	Moderate.	Severe.	Total.
Gonococcal, ... ..	—	—	—	—
Other organisms, ... ..	34	8	3	45
Pus, but no organisms, ... ..	20	8	2	30
No pus, no bacteria, ... ..	5	1	1	7
No swab, ... ..	3	—	1	4
	62	17	7	86

#### ANTE-NATAL SUPERVISION.

The Nurse Health Visitors made 6,394 domiciliary visits to expectant mothers during the year. At the Child Welfare Centres, 1,061 patients attended for the first time, and the total visits numbered 2,220.

Ante-Natal Clinics are held at the following Centres :—

Bellshill Hospital, daily except Saturday, ...	10-30 a.m.
Blantyre, Monday, ... ..	2-30 p.m.
Shotts, Tuesday, ... ..	10-30 a.m.
Cambuslang, Thursday and Friday, ...	2-30 p.m.
*Larkhall, Thursday, ... ..	10 a.m.

\*Opened 21/6/37.

The following table shows the number of first and revisits in connection with the ante-natal, post-natal, gynaecological, and other consultations :—

	Ante-natal.				Post-natal, Gynaecological and Others.		
Clinic.	First Visits.				Re-visits.	First Visits.	Re-visits.
	Referred to Ante-natal Wards.	Referred to own Doctor.	Treated at Home.	Total.			
Bellshill, ...	58	26	1,084	1,168	2,537	67	2
Blantyre, ...	4	1	207	212	780	6	—
Cambuslang,	7	6	298	311	1,234	19	—
Larkhall, ...	6	1	113	120	373	5	1
Shotts, ...	12	4	236	252	786	25	10

Further details regarding ante-natal clinics are given in the County Maternity Hospital report, see page 429.

Ante-natal cases were admitted to the various institutions as follows :—County Hospital, Bellshill, 300 ; Calderbank Convalescent Home, 30 ; and Lanark Hospital, 8.

*Albuminuria.*—The total number of expectant mothers under observation in respect of albuminuria was 347, of whom 238 were confined during the year. Altogether, 5,843 specimens of urine were examined. Of these, 5,764 were sent to the Child Welfare Centres—5,566 by patients and 198 were submitted by certified midwives. Seventy-nine specimens were examined at the County Laboratory, 66 of these being sent in by midwives and 13 by members of the Public Health Staff.

*Confinement Outfits.*—719 special outfits prepared at the County Maternity Hospital, Bellshill, were supplied through the various Child Welfare Centres to mothers in necessitous circumstances. The cost of these outfits is 4s. 6d. each, but this charge may be modified in very exceptional circumstances.

#### HOSPITAL TREATMENT.

Patients are admitted to the County Maternity Hospital, Bellshill, either on account of unsuitable home conditions or because of any abnormality of pregnancy or labour. An analysis of 1,457 admissions shows that 397 (27·2 per cent.) were dealt with on account of housing conditions, 263 (18·0 per cent.) were primiparae, and 797 (54·7 per cent.) had an abnormality of the present or previous pregnancy.

They contribute to the cost of their treatment according to a scale of income. The assessments for the year totalled £2,289, and, of this amount, £2,092 was actually paid. The receipts represent 12·9 per cent. of the annual maintenance charges.

#### CHILD WELFARE CENTRES.

Table M V shows the attendances of mothers, infants, and children at the Child Welfare Centres during 1937 :—

TABLE M V.

Centres.	No. of Sessions.	Total Attendances.		
		Mothers.	Children.	
			Under 1 year.	Over 1 year
Airdrie, ...	22	516	276	236
Baillieston, ...	44	2,359	1,004	1,059
Bellshill, ...	48	3,361	1,537	1,097
Bishopbriggs, ...	47	1,317	663	485
Blantyre, ...	48	2,192	1,184	982
Cadzow, ...	44	1,612	862	819
Cambuslang, ...	48	1,894	1,004	851
Carluke, ...	22	795	510	313
Chapelhall, ...	22	503	309	241
Chryston, ...	47	2,049	1,039	981
Coalburn, ...	12	286	170	116
Lanark, ...	22	1,016	667	349
Larkhall, ...	44	2,208	1,106	856
Newarthill, ...	48	1,621	855	734
Newmains, ...	47	1,830	1,143	942
New Stevenston, ...	47	1,986	1,123	920
Shotts, ...	47	1,989	1,386	787
Strathaven, ...	22	527	274	273
Tannochside, ...	45	2,297	1,221	1,004
Uddingston, ...	48	2,131	1,297	981
		32,489	17,630	13,026

## MEDICAL CONSULTATIONS.

Table M VI shows the number of sessions held and the number of first visits and re-visits made by mothers, infants, and children.

TABLE M VI.

Centre.	MOTHERS.					CHILDREN.					
	No. of Sessions.	Ante-natal 1st Visit.	Total.	Post-natal and others. 1st Visit.	Total.	Under 1 year. 1st Visit.	Total.	Over 1 year. 1st Visit.	Total.		
Airdrie, ...	...	22	57	73	68	151	52	116	53	98	
Baillieston, ...	...	44	110	263	148	336	123	271	133	228	
Bellshill, ...	...	48	160	278	515	716	164	365	203	363	
Bishopbriggs, ...	...	47	45	137	74	230	62	189	80	230	
Blantyre, ...	...	48	22	25	162	284	161	620	185	439	
Cadzow, ...	...	44	57	223	84	224	63	313	76	249	
Cambuslang, ...	...	48	15	17	235	463	174	346	203	359	
Carluke, ...	...	22	35	51	58	100	37	62	66	127	
Chapelhall, ...	...	22	27	45	52	135	65	189	47	123	
Chryston, ...	...	47	45	139	73	181	82	244	72	187	
Coalburn, ...	...	12	6	9	27	37	16	32	29	55	
Larkhall, ...	...	44	78	192	193	322	165	412	214	452	
Lanark, ...	...	22	37	80	47	99	59	119	68	138	
Newarthill, ...	...	48	69	105	95	177	93	249	99	229	
Newmains, ...	...	47	22	28	211	320	197	496	231	385	
New Stevenston, ...	...	47	72	171	125	157	119	280	138	279	
Shotts, ...	...	47	22	28	208	323	201	495	209	367	
Strathaven, ...	...	22	20	53	28	50	40	112	46	94	
Tannochside, ...	...	45	90	140	219	387	134	301	139	289	
Uddingston, ...	...	48	72	163	163	388	125	350	155	363	
		1,061	2,220	2,785	5,080	2,132	5,561	2,446	5,054		

*Infants and Children.*—Table M VII shows the illnesses recorded among infants and children, and it should be noted that the figures refer to the number of cases of each disease for which it was considered necessary to consult the doctor. These figures do not correspond with the total attendances, since repeated consultations for the same disease represent only one illness, nor, on the other hand, do they correspond with the first attendances, as a child may have had a revisit for a new ailment, in which event both illnesses were recorded.

TABLE M VII.  
ILLNESSES OF INFANTS AND CHILDREN ATTENDING CENTRES.

CENTRE.	Gastro- Intestinal.	Difficult Digestion.	Intestinal Worms.	Respiratory.	Tuberculosis.	Skin.	Ear, Nose, and Throat.	Eyes.	Teeth.	Rickets.	Hernia.	Phimosis.	Anal Prolapse.	Club-foot.	Infantile Paralysis.	Injury to Foot.	Cleft Palate.	Others.	TOTAL.
Airdrie, -	14	15	2	21	—	19	6	6	9	4	5	2	—	—	—	—	—	28	131
Baillieston, -	37	20	3	62	—	45	19	13	25	12	11	3	2	—	—	—	—	96	348
Bellshill, -	44	67	5	83	—	85	39	34	16	10	9	4	—	—	—	—	—	79	475
Bishopbriggs, -	32	16	8	37	—	47	20	17	9	12	2	1	—	—	1	—	—	56	258
Blantyre, -	67	56	6	50	—	35	45	24	32	17	10	—	—	—	—	—	—	99	441
Cadzow, -	34	24	2	35	—	37	19	19	7	12	2	5	—	—	—	—	—	49	245
Cambuslang, -	39	54	8	71	—	77	75	18	17	17	26	1	—	—	—	—	—	149	552
Carluke, -	26	3	3	13	—	19	13	11	6	1	5	—	—	—	—	—	—	12	112
Chapelhall, -	23	17	4	32	—	23	8	5	5	2	3	1	—	—	—	—	—	24	147
Chryston, -	22	20	6	25	—	35	23	11	18	11	12	3	1	—	—	1	—	50	238
Coalburn, -	7	4	2	4	—	4	5	6	4	2	2	2	—	—	—	—	—	8	50
Larkhall, -	92	44	7	48	—	74	69	42	21	21	24	4	—	—	—	—	—	100	546
Lanark, -	33	11	3	10	—	19	8	7	20	3	2	1	—	—	—	—	—	20	137
Newarthill, -	37	36	4	55	—	35	21	17	11	7	6	4	—	—	—	—	—	53	286
Newmains, -	85	70	8	48	—	95	94	47	40	7	10	8	—	—	—	—	—	145	657
New Stevenston, -	48	36	5	106	—	57	36	20	9	3	5	3	—	—	—	—	—	71	399
Shotts, -	85	65	8	41	—	92	87	44	36	10	8	7	—	—	—	—	—	112	595
Strathaven, -	5	11	2	18	—	30	14	7	4	3	5	2	—	—	—	—	—	35	136
Tannochside, -	31	42	3	65	—	68	24	35	16	5	9	2	—	—	—	—	—	58	358
Uddingston, -	26	40	6	59	—	57	32	23	14	5	11	—	—	—	—	—	—	67	340
	787	651	95	883	—	953	657	406	319	164	167	53	3	—	—	2	—	1,311	6,451

*Ante-Natal Cases.*—During the year 1,061 ante-natal cases (representing 1,485 conditions) were seen at the Child Welfare Centres. These are shown in the following table according to Centres and the conditions found.

Of the above cases, 618 were referred for treatment to the ante-natal wards, 254 were referred to the family doctors, and the remaining 189 received treatment at the Clinics.

TABLE M VIII.  
ANTE-NATAL CASES.

CENTRE	Normal.	Contracted Pelvis.	Albuminuria.	Hypertæmia.	Hæmorrhage and Threatened Abortion.	Hydræmia.	Leucorrhœa.	Varicose Veins and Hæmorrhoids.	Respiratory.	Cardiac.	Gastro-Intestinal.	Dental Caries.	Abdominal Pain.	Previous Abnormality.	Debility.	Others.	Abnormal Presentation.	TOTAL.
Airdrie, -	30	—	1	2	—	—	—	5	—	—	—	1	4	10	6	21	—	80
Baillieston, -	21	—	10	2	—	—	—	10	3	—	—	6	5	2	11	62	—	135
Bellshill, -	122	—	4	2	1	—	—	14	5	—	—	8	3	27	7	61	—	254
Bishopbriggs, -	5	—	5	—	5	—	—	6	1	—	—	3	3	1	7	19	—	58
Blantyre, -	1	—	—	—	1	—	—	1	1	—	—	5	—	1	6	10	—	26
Cadzow, -	13	—	10	4	2	1	—	6	2	—	—	5	—	8	3	44	1	100
Cambuslang, -	—	—	1	—	—	—	—	2	1	—	—	5	—	—	2	—	—	11
Carluke, -	11	—	1	—	1	—	—	1	1	1	—	2	1	1	5	9	—	36
Chapelhall, -	17	—	1	—	—	—	—	3	—	—	—	—	1	—	1	10	—	34
Chryston, -	9	—	3	1	1	—	—	1	2	1	—	6	2	2	7	31	—	67
Coalburn, -	—	—	—	—	1	—	—	—	1	—	—	—	1	—	—	6	—	9
Lanark, -	16	—	—	—	—	—	—	1	1	1	—	1	4	—	—	19	—	44
Larkhall, -	20	1	18	10	1	—	—	5	1	—	—	3	5	8	7	15	1	98
Newarthill, -	51	—	1	—	—	—	—	4	—	1	—	5	1	6	4	33	—	106
Newmains, -	1	—	—	—	1	1	—	—	—	—	—	1	2	2	4	12	—	26
New Stevenston, -	53	—	6	—	—	—	—	5	2	—	—	4	1	8	6	32	—	117
Shotts, -	3	—	—	—	1	—	—	2	—	—	—	1	2	2	4	18	—	34
Strathaven, -	7	—	1	—	1	—	—	3	—	—	—	1	—	1	2	4	—	22
Tannockside, -	42	1	3	2	1	—	—	7	—	—	—	5	3	7	13	37	—	123
Uddingston, -	19	—	—	1	1	—	—	9	5	—	—	6	—	6	15	40	—	105
	441	2	65	24	18	2	25	85	26	4	—	68	38	92	110	483	2	1,485



*Post-Natal and Other Consultations.*—Table MIX shows the post-natal, gynaecological, and other consultations which were made at the various Centres :—

TABLE MIX.  
POST-NATAL AND OTHER CONSULTATIONS.

CENTRE.	POST-NATAL.										GYNAECOLOGICAL.										OTHERS.					
	Uterine Displacement.	Cervical Tear.	Leucorrhoea.	Disease of the Breast.	Varicose Veins.	Albuminuria.	Gastro-Intestinal.	Respiratory.	Dental.	Anæmia and Debility.	Others.	Total.	Uterine Displacement.	Cervical Tear.	Endometritis.	Disorders of Menstruation.	Ovarian Pain.	Others.	Total.	Respiratory.	Gastro-Intestinal.	Nephritis.	Dental.	Anæmia and Debility.	Others.	Total.
Airdrie,	...	—	—	1	1	1	—	—	11	20	10	43	—	—	—	2	—	6	8	1	2	—	15	7	3	28
Baillieston,	...	—	3	1	1	2	3	—	15	55	19	99	—	—	—	2	—	11	13	3	12	3	46	20	15	99
Bellshill,	...	—	1	2	—	2	—	—	80	82	11	178	—	—	—	6	—	9	15	5	1	1	300	30	27	364
Bishopbriggs,	...	—	—	4	—	1	—	—	—	19	7	31	1	—	—	—	—	7	8	2	8	—	8	20	16	54
Blantyre,	...	—	1	3	—	3	—	—	33	49	12	101	—	—	—	5	—	4	9	7	1	3	52	16	8	87
Cadzow,	...	—	—	1	1	1	—	—	9	28	7	46	—	—	—	3	—	6	9	6	8	1	17	7	23	62
Cambuslang,	...	—	15	6	—	16	—	—	43	54	61	195	—	—	—	7	—	10	17	7	5	3	53	18	36	122
Carluke,	...	—	—	2	—	—	—	—	8	13	7	30	—	—	—	3	—	2	5	4	7	—	9	5	4	29
Chapelhall,	...	—	—	2	—	—	—	—	2	13	8	25	—	—	—	1	—	4	5	1	—	1	11	8	6	27
Chryston,	...	—	—	2	1	—	—	—	3	21	6	33	1	—	—	—	—	5	6	1	5	—	18	12	9	45
Coalburn,	...	—	—	—	—	—	—	—	10	4	4	18	—	—	—	1	—	2	3	—	3	—	3	—	3	9
Lanark,	...	—	1	2	—	—	—	—	7	14	8	32	—	—	—	4	—	—	4	3	4	—	3	2	4	16
Larkhall,	...	—	1	4	—	2	—	—	32	59	25	123	—	—	—	5	—	4	9	4	2	4	55	11	17	93
Newarthill,	...	—	—	2	—	—	—	—	12	35	2	51	—	—	—	3	—	3	6	2	2	1	32	12	10	59
Newnains,	...	—	2	5	—	4	—	—	35	57	31	134	—	—	—	7	—	6	13	1	—	—	38	19	21	79
New Stevenston,	...	—	1	2	—	1	—	—	24	40	13	81	—	—	—	7	—	4	11	5	1	—	54	14	10	84
Shotts,	...	—	2	6	—	4	—	—	35	59	39	145	—	—	—	7	—	9	16	2	1	—	50	17	21	91
Strathaven,	...	—	1	—	—	—	6	—	2	2	5	16	—	—	—	1	—	3	4	1	1	—	6	3	6	17
Tannochside,	...	—	3	5	—	1	—	—	46	45	12	112	—	—	—	5	—	2	7	3	1	2	109	17	14	146
Uddingston,	...	—	3	3	—	—	—	—	33	69	22	130	—	—	—	2	—	6	8	4	3	—	38	18	11	74
	—	—	34	53	2	38	6	3	440	738	309	1,623	2	—	—	71	—	103	176	62	67	19	917	256	264	1,585



MINOR AILMENTS AND ARTIFICIAL SUNLIGHT TREATMENT AT THE  
FOLLOWING CENTRES :—

	MINOR AILMENTS.				ARTIFICIAL SUNLIGHT TREATMENT.		
	Anaemia and Debility.	Mothers. Diseases.	Skin.	Children. Eyes.	Others.	Mothers. New Cases.	Children. New Cases.
Blantyre Health Institute, ...	1	11	59	198	65	173	516
Cambuslang Health Institute,	6	8	13	94	23	100	375
Larkhall Health Institute (opened 21/6/37), ...	—	4	10	41	15	61	300
Shotts Health Institute, ...	5	2	11	27	4	22	255
Lanark Child Welfare Centre, ...	—	—	—	—	—	—	89
Calderbank House (Out-Patient Department), ...	—	—	—	—	—	192	140

## TREATMENT OF SQUINT.

The work in connection with the treatment of squint cases is summarised in the following statement:—

Cases Examined at				First Cases.	Spectacles Prescribed.	Re-examined.
Bellshill, ... ..	...	...	...	43	36	110
Blantyre, ... ..	...	...	...	17	14	22
Cambuslang, ... ..	...	...	...	15	8	32
Shotts, ... ..	...	...	...	20	18	27
Larkhall, ... ..	...	...	...	8	9	21
				103	85	212

## DENTAL TREATMENT—MOTHERS AND CHILDREN.

During the year, 1,525 mothers and 272 children were recommended for dental treatment, and, of these, 1,266 mothers and 202 children attended the dental surgeons appointed by the Local Authority:—

Centre.	MOTHERS.		CHILDREN.	
	Recommended for Treatment.	Attended Dentist.	Recommended for Treatment.	Attended Dentist.
Airdrie, ... ..	28	22	10	8
Baillieston, ... ..	67	48	25	18
Bellshill, ... ..	414	385	15	12
Bishopbriggs, ... ..	11	4	6	4
Blantyre, ... ..	97	56	28	15
Cadzow, ... ..	27	13	5	3
Cambuslang, ... ..	112	112	27	25
Carluke, ... ..	22	20	4	3
Chapelhall, ... ..	20	19	3	2
Chryston, ... ..	37	30	12	10
Coalburn, ... ..	24	7	7	—
Lanark, ... ..	31	23	11	11
Larkhall, ... ..	88	78	16	13
Newarthill, ... ..	64	54	7	5
Newmains, ... ..	69	62	36	34
New Stevenston, ... ..	92	72	9	3
Shotts, ... ..	89	78	25	20
Strathaven, ... ..	12	6	2	—
Tannochside, ... ..	162	134	10	6
Uddingston, ... ..	59	43	14	10
	1,525	1,266	272	202

## EAR, NOSE, AND THROAT AILMENTS.

No. of Sessions.	No. of 1st Visits.	No. of Re-visits.	Operations Recommended.	Operations Performed.
22	159	120	115	90

The operations performed were as follows :—

Tonsils and Adenoids, ... ..	88
Adenoids and Cyst, ... ..	1
Removal of foreign body from nose, ... ..	1

In addition, 8 patients receiving in-patient treatment in Calderbank House had operations, as follows :—Tonsils and adenoids, 5 ; tonsils, 1 ; double mastoid, 1 ; ethmoid, 1.

## EDUCATIONAL WORK.

*Kodascope*.—In January the Maternity and Child Welfare Committee approved of a proposal to exhibit a series of instructive films at the Health Institutes and such Child Welfare Centres as could be adapted readily for the purpose. Accordingly, arrangements were made for the use of the Kodascope projector and screen purchased some time ago for the County Maternity Hospital, Bellshill. It was also decided to hire non-inflammable films on the following topics :—

“ The Terror that Walks by Night,” ... ..	Bug infestation and how to eradicate them.
“ Two Little Pigs,” ... ..	} The care of teeth, issued by the Dental Board of Control.
“ Smile if you dare,” ... ..	
“ The Empty Bed,” ... ..	Immunisation against Diphtheria.
“ Bathing and Dressing,” ... ..	Infant management.
“ How to Bone a Herring,” ... ..	} Herring as a food, issued by the Empire Film Library.
“ Our Herring Industry,” ... ..	
“ Normal Breast Feeding.”	

Later in the year an Ensign Ciné Camera was purchased for the Department, and it will be possible to photograph subjects pertaining to the Local Authority's own services. One such film dealing with the work of the Child Welfare Centres is in preparation and soon another on the Home Help Scheme will be commenced.

It is anticipated that one film each month will be exhibited at the Centres. This development of the educational work of the Maternity and Child Welfare Scheme appears to have captivated the interest of the mothers and, it is hoped, will prove of value.

*Cookery Demonstrations.*—During the early months of the year it was suggested that cookery demonstrations be given in the homes. Mothers had pointed out that the facilities at a Centre were greatly different from those they had in their houses, and that they would like to see what could be done with their utensils and on their own fires.

Accordingly, it was arranged that any mother who made application for a home demonstration could have a visit from the cookery teacher. The mother was given a choice of menu, and when this was decided was told what materials to buy.

The scheme has been successful and those participating have expressed themselves as greatly benefited; they remember the various points so much better when shown in the quietness of their own homes.

In all, 39 such demonstrations have been carried out.

*Lectures.*—Eight lectures on the following subjects were given during the year:—Washing of Woollen Garments; Advice to Parents of Young Children *re* Diet; Habits; Constipation; Teeth; Scarlet Fever and Diphtheria Immunisation; Home Helps; and Social Services.

The following Table shows the number of Demonstrations and Lectures given at the various Centres during the year:—

		Demonstrations.		Lectures.	Kodascope.
Centre.		Dressmaking.	Cookery.		
Airdrie,	...	—	—	—	1
Baillieston,	...	12	9	—	5
Bellshill,	...	23	13	4	1
Bishopbriggs,	...	8	11	—	2
Blantyre,	...	12	6	1	6
Cadzow,	...	9	9	1	5
Cambuslang,	...	19	11	—	3
Carluke,	...	11	8	—	1
Chapelhall,	...	10	—	—	3
Chryston,	...	10	13	—	5
Coalburn,	...	5	—	—	—
Lanark,	...	10	—	—	3
Larkhall,	...	8	11	2	3
Newarthill,	...	10	11	—	1
Newmains,	...	6	9	—	6
New Stevenston,	...	11	11	—	4
Shotts,	...	9	10	—	6
Strathaven,	...	—	—	—	5
Tannochside,	...	12	8	—	6
Uddingston,	...	11	13	—	—
		196	153	8	66

STATEMENT showing Quantity and Cost of Milk, Milk Substitutes and other Food supplied under Maternity and Child Welfare Scheme to Expectant and Nursing Mothers and Children under Five Years of Age during the Year ended 31st December, 1937.

	Mothers.	Children.
1. No. of persons supplied with liquid milk, dried milk, milk substitutes and other food preparations, ... ..	2,170	2,727
2. Liquid milk. Total quantity supplied (gallons), ... ..	22,422½	164½
3. Dried milk and other milk substitutes, ... ..	...	1,424 lbs.
4. Other food preparations—		
Oatmeal, ... ..	...	44,819 lbs.
Virol, ... ..	...	1,858 lbs.
Virolax, ... ..	...	367 lbs.
Malt and Oil, ... ..	...	2,135 lbs.
Cod Liver Oil Emulsion, ... ..	...	152 galls.
Others, ... ..	...	109 lbs.
5. Total cost to Local Authority, under heads 2, 3, and 4.,	<div> <div>(2)</div> <div>(3)</div> <div>(4)</div> </div>	<div> <div>£2,316 18 3</div> <div>93 1 5</div> <div>897 19 1½</div> </div>
Total, ... ..	£3,307 18 9½	
Amount recovered by Local Authority,	91 0 2½	
Net Cost, ... ..	£3,216 18 7	

#### CHILDREN AND YOUNG PERSONS (SCOTLAND) ACT, 1937.

In the following paragraph the statutory notices received throughout the year are recorded :—

Children on Infant Protection Register at 31st December, 1936, ... ..	100
Notices received in terms of Section 1 (1) of the Act, ... ..	43
Notices received from Guardians on removal to the area of the Council from the area of another Authority, ... ..	3
	<hr/>
	146
	<hr/>

Notices received under Section 1 (5) of the Act :—

Of deaths of Children, ... ..	1
Of removals of Children, ... ..	7
Removals, under Section 5 of the Act, of Children improperly kept, ... ..	—
Children otherwise removed from Register—	
(a) On attaining the age of nine years, ...	6
(b) On Guardians' removal from area of Council, ... ..	3
(c) For other reasons, ... ..	*32
Children on Register at 31st December, 1937, ...	97
	<hr/>
	146
	<hr/>

\*Returned to mother, 12; legally adopted, 20.

Throughout the year 377 visits were made by the Infant Protection Visitors. The reports indicate that all the children have received good homes and are well cared for.

#### DISTRICT NURSING ASSOCIATIONS.

A list of the District Nursing Associations engaged in the Maternity and Child Welfare work is given in the following Statement, which also shows the number of visits for the year and the remuneration paid by the Local Authority :—

	Number of Births.	Number of First Visits.	Number of Re-visits.	Total Visits.	Fee Paid.
Motherwell and District,	13	12	161	173	£25
Glenboig, ... ..	73	73	977	1,050	25
Caldercruix, ... ..	87	87	427	514	20
Stonehouse, ... ..	63	60	883	943	15
Quarter, ... ..	23	24	396	420	25
Bothwell, ... ..	63	68	479	547	20
Glasford, Visitation, Maternity Work, }	23	14	323	337	{ 20 15
(less fees paid by patients)					
Biggar, ... ..	40	36	544	580	20
Forth and District, ...	90	93	917	1,010	25
Crawford, ... ..	15	15	249	264	26
Lesmahagow, ... ..	54	50	583	633	25
Carmichael, Anstruther,	18	15	144	159	15
Carnwath, ... ..	22	21	264	285	15
Leadhills, ... ..	11	12	168	180	10
Blantyre, ... ..	Assistance	at Health Institute,			£10 10/-

## HOME HELP SCHEME.

During the year the County Council inaugurated the following scheme for the provision of Home Helps:—

Home Helps will be available to mothers who are incapacitated at home by reason of pregnancy or confinement. The normal period of attendance will be 14 days, but this may be extended if the Medical Officer of Health is satisfied that continued attendance is necessary on medical grounds.

If the confinement takes place in hospital a Home Help will be supplied, as above-mentioned, where there is one or more children under 5 years in the household.

Applicants for the services of a Home Help will furnish a statement of the family income and will contribute to the cost according to a scale approved by the County Council. All contributions will be paid in advance.

Home Helps will be paid by the County Council at an approved rate if their services are to the satisfaction of the Medical Officer of Health, and if they conform to the conditions laid down by the Local Authority.

*Rules for the Guidance of a Home Help.*

1. She must attend daily at the home to which she is sent from 8 a.m. to 6 p.m. (Sundays excepted, save where Sunday occurs within four days after confinement.) If she is engaged as a part-time home help, the hours of attendance will be from 8 a.m. to 2 p.m.

The usual period for which she will be required for each case will be 14 days.

2. She must—

- (a) Keep the house clean and tidy.
- (b) Cook and prepare meals for the family.
- (c) Care for any children there may be, and see that those attending school do so punctually and are clean and tidy.
- (d) Do the washing (except arrears), including linen soiled during the confinement.



3. She must not interfere with the instructions of the doctor or midwife, and must recognise that she is NOT a nurse, but simply a domestic help.

4. She must supply and cook her own food, and not use the food provided by the family for whom she works.

5. Where a case of infectious disease occurs in the house of a Home Help, or in the family of the patient, or should the Home Help in any way come into contact with infection, she must report at once to the HEALTH DEPARTMENT for instructions.

6. Payment will be made by the HEALTH DEPARTMENT as soon as proof is obtained of satisfactory service. The rate of pay will be 5s. per day, less Health Insurance, if the daily attendance is from 8 a.m. to 6 p.m., and 3s. 6d. per day if the daily attendance is from 8 a.m. to 2 p.m. NO CHARGE MUST BE MADE TO THE PATIENT NOR PRESENTS ACCEPTED FROM THE PATIENT. 'Bus fares will be allowed in approved circumstances.

7. Where the Health Department has agreed to provide the services of a Home Help, a written order is issued stating the name and address of the household requiring her services. Without such written order, no payment will be made.

8. Any conduct on the part of the Home Help which is contrary to the interests of the household where she is employed, will, if brought to the notice of the Department, lead to her name being removed from the list.

9. Home Helps are specially warned that THEY MUST NOT under any circumstances GOSSIP about the affairs of the families to which they have been sent.

#### SCALE OF CHARGES.

##### SCALE I.

*For Whole-time Home Help (hours, 8 a.m. to 6 p.m.).*

There will be a minimum charge of 1s. per day, and when the family income exceeds the Able-Bodied Relief Scale, plus 7s. per week, the charge will be increased by 6d. per week for every additional 1s. per week of income.

Deductions from income from working sons and daughters, etc., will be in accordance with the Scheme adopted by the Public Assistance Committee.

*Examples.*

For family comprising Husband, Wife and 3 Children :—

Family Income.	Payment by Patient.	Payment by Local Authority.
35/-	14/-	56/-
40/-	14/-	56/-
50/-	22/-	48/-
60/-	32/-	38/-
70/-	42/-	28/-
80/-	52/-	18/-
100/-	70/-	Nil.

SCALE II.

*For Part-time Home Help (hours, 8 a.m. to 2 p.m.).*

The charges will be reduced in proportion, *i.e.*, they will be approximately seven-tenths of the basic scale, and the increase over the minimum charge of 10s. for 14 days' attendance will take place when the family income exceeds the Able-Bodied Relief Scale by 5s. per week.

*Examples.*

For family comprising Husband, Wife and 3 Children :—

Family Income.	Payment by Patient.	Payment by Local Authority.
35/-	10/-	39/-
40/-	10/-	39/-
50/-	15/-	34/-
60/-	22/-	27/-
70/-	29/-	20/-
80/-	36/-	13/-
100/-	49/-	Nil.

The Scheme became operative in October, 1937. During the period between then and the end of the year, 11 Home Helps were provided, 10 full-time and 1 part-time. Approximately, two-thirds of the cost of these, in accordance with the scale, was borne by the County Council and one-third by the patients, the actual figures being £26 13s. 0d. and £16 4s. 6d. respectively. The requests were made from the areas of the County as follows:—

Upper Ward,	...	...	7
Lower Ward,	...	...	1
Middle Ward,	...	...	3

Six other applications were received and later withdrawn for the following reasons:—

Other arrangements made with relatives, ...	3
Refused to disclose information regarding social circumstances, ... ..	3
Inability to meet cost was the reason given for withdrawal of application in only one case.	

One difficulty encountered at the commencement of the Scheme concerned two applications from women residing in rural areas where no local Home Helps were available. In these cases, Home Helps from a distance were asked to live in the homes of the patients during their period of service and in each case the arrangement proved satisfactory.

So far as it has been used, the Scheme has proved satisfactory. Home Helps are now readily available in most areas of the County. There has been no difficulty about payment and no complaint concerning the services rendered has been received. Indeed, the Home Help has been much appreciated by patient, midwife and doctor alike, and in four cases an extension of the normal period of service was requested and granted.

It is hoped that the benefit of this scheme will become more recognised and more generally taken advantage of. A revision of the scale of payment may be a necessary step towards attaining this end, even the minimum cost being regarded by many prospective applicants as more than they are prepared to pay.

#### MIDWIVES AND MATERNITY HOMES (SCOTLAND) ACTS, 1915 AND 1927.

*Practising Midwives.*—During the year, 174 certified midwives (104 resident within and 70 resident outwith the County) notified

their intention to practise. A list of these midwives was forwarded to the Central Midwives Board on 2nd February, 1938.

The qualifications of the practising midwives are as follows :—

				1937.
Certificate of the Central Midwives' Board (Scotland),	...	...	...	83
Certificate of the Central Midwives' Board (England),	...	...	...	6
Certificate of the Central Midwives' Board (Ireland),	...	...	...	2
Trained and Certified by the Royal Maternity Hospital (Glasgow),	...	...	...	10
Trained and Certified by the Rotunda Hospital (Dublin),	...	...	...	1
In <i>bona fide</i> practice and certified under the Act, ...	...	...	...	72
				<hr/>
				174
				<hr/>

The above indicates that 102 (58·6 per cent.) of the midwives are trained and 72 (41·3 per cent.) untrained.

The distribution of the practising midwives according to District Council Areas is as follows :—

District Council Area.				Number of Midwives.	District Council Area.				Number of Midwives.
No. I,	...	...	...	1	No. VII,	...	...	...	8
No. II,	...	...	...	5	No. VIII,	...	...	...	9
No. III,	...	...	...	2	No. IX,	...	...	...	21
No. IV,	...	...	...	19	Lanark Burgh,	...	...	...	2
No. V,	...	...	...	8	Resident outwith County,	...	...	...	70
No. VI,	...	...	...	29					<hr/>
					Total,	...	...	...	174
									<hr/>

*Change of Address.*—The changes of address of 11 midwives were reported to the Board.

*Deaths.*—Two midwives died during the year (C.M.B. Numbers 1143 and 9534).

*Inspection of Midwives.*—The routine inspection of midwives resident in the County numbered 436. In addition, 199 special inspections were made on account of non-compliance with the rules. It was found that 1 midwife had no scissors and 5 had not supplied themselves with thermometers. The Inspectors reported that in 5 instances the charts were not correctly kept.

*Attendance at Confinements.*—The number of births notified as having been attended by certified midwives was 1,554, which represents 26·0 per cent.

*Attendance by Unqualified Persons.*—In 39 instances an unqualified person conducted the confinement. In 33 cases it was found that the attendance had been given in emergency and no further action was necessary. There was apparent irregularity in 8 cases, and the women concerned were interviewed by the Assistant Medical Officers of Health.

*Infantile Deaths.*—The total number of infantile deaths was 421. In 148 instances the deaths occurred in infants during the first ten days, and 25 of these were in the practice of certified midwives. The causes of death were as follows:—Premature birth, 81; debility, 26; injury at birth, 7; atelectasis, 6; congenital heart, 8; congenital malformation, 11; pneumonia, 1; violence, 1; meningitis, 1; syphilis, 1; and others, 5.

*Ophthalmia Neonatorum.*—There were 62 notified cases of ophthalmia, 14 of these occurring in the practice of certified midwives. In addition, 86 cases of discharging eyes were detected by the Health Visiting Staff, and 22 of these occurred among midwives' cases.

*Puerperal Fever and Pyrexia.*—The total number of cases notified was 100, and 14 of these occurred in the practice of midwives. There were 8 deaths, 1 of which related to a midwife's case.

*Still-births.*—The total number of still-births was 229, 25 of these being midwives' cases.

*Examination of Urine.*—Sixty-six specimens of urine were sent to the County Laboratory by certified midwives, 29 giving a positive result. At the Child Welfare Centres 198 specimens were submitted by certified midwives, and of these, 31 proved positive.

*Liability to be a Source of Infection.*—Nineteen notifications were received from midwives, as follows:—Puerperal fever, 2; puerperal pyrexia, 10; scarlet fever, 2; septic throat, 1; lobar pneumonia, 1; erysipelas, 2; and diphtheria, 1.

*Form of having Laid out a Dead Body.*—Six notifications were received, 4 for infants and 2 for mothers.

*Form of Notification of Artificial Feeding.*—Thirteen notifications were received that midwives had advised mothers to substitute bottle feeding for breast feeding.

*Notification of Patients' Failure to Follow Advice.*—Twenty-seven notifications were received regarding patients who failed either to seek

medical advice or avail themselves of the pre-natal services provided by the Local Authority.

*Provision of Midwifery Attendance in Necessitous Cases.*—The Local Authority authorised the attendance of certified midwives at 132 confinements of women in necessitous circumstances, and fees of £1 5s. each were paid for the services rendered. In two emergency abortion cases a modified fee of 15s. each was paid.

In 8 instances medical practitioners were requested to attend in districts where there were no resident midwives, and a fee of £2 2s. was paid in each case.

*Compensatory Fees.*—In 49 instances, where certified midwives either called in doctors or referred their patients to a Child Welfare Centre, and the patients were subsequently removed to the County Maternity Hospital, for confinement, a fee of 10s. each was paid.

*Medical Assistance.*—Medical aid was sought by midwives in 920 instances, representing 60·6 per cent. of the births attended by certified midwives. The conditions for which assistance was obtained are detailed in Table M X.

*Payment of Doctors' Claims.*—The claims sent in by medical practitioners under Section 22 of the 1915 Act, as amended by Section 4 of the 1927 Act, numbered 719, representing 78·1 per cent. of the cases to which they had been called, and amounted to £1,128 11s. 3d. Of the total expenditure, £25 10s., or 2·2 per cent., was recovered.

TABLE M X.

Year	Births attended by Midwives	Medical Assistance Forms received	Percentage of Midwives' cases requiring Medical Assistance	Doctors' Claims		Amount of Account			Recovery recommended			Amount recovered			Per cent.
				No.	Per cent.	£	s.	d.	£	s.	d.	£	s.	d.	
1931	1,872	866	46·2	630	72·7	944	6	0	82	18	0	34	10	0	3·6
1932	1,790	912	50·9	704	77·1	1,106	14	0	52	6	0	30	8	11	2·7
1933	1,536	906	58·9	659	72·7	1,028	12	9	42	18	6	28	7	6	2·7
1934	1,582	920	58·1	705	76·6	1,110	0	0	79	0	0	18	1	6	1·6
1935	1,410	888	62·9	625	70·3	959	17	6	45	1	6	11	11	0	1·1
1936	1,384	869	62·7	781	87·5	1,223	5	3	44	18	0	17	15	6	1·4
1937	*2,031	920	45·3	719	78·1	1,128	11	3	56	14	0	25	10	0	2·2

\*This figure includes 514 cases primarily attended by midwives but which were ultimately confined by a practitioner summoned in emergency and were classified as attended by a "doctor and midwife."



Records of sending for medical assistance classified according to District Council Areas and the conditions requiring medical aid :—

TABLE M XI.

Reasons for Medical Assistance.	DISTRICT COUNCIL DISTRICTS.								Total during 1937. 1936.	
	No. II	No. III	No. IV	No. V	No. VI	No. VII	No. VIII	No. IX		
<i>Mother—</i>										
Prolonged Labour, ...	11	—	44	102	99	9	16	44	325	337
Contracted Pelvis, ...	—	—	1	1	6	—	1	4	13	11
Uterine Inertia, ...	1	—	1	—	57	5	2	14	80	74
Abnormal Presentation, ...	1	—	4	15	51	3	3	20	97	76
Prolapsed Cord, ...	—	—	—	1	2	—	—	3	6	8
Placenta Praevia, ...	—	—	—	1	1	1	—	2	5	3
Ante-partum Haemorrhage, ...	1	—	1	5	18	—	1	5	31	28
Post-partum Haemorrhage, ...	—	—	1	2	4	—	—	—	7	10
Haemorrhage (unqualified), ...	—	—	1	7	8	—	—	5	21	15
Retained Placenta or Membranes, ...	—	—	3	3	8	5	3	3	25	23
Hydramnios, ...	—	—	—	—	2	—	—	2	4	3
Eclampsia and Convulsions, ...	—	—	—	—	—	—	—	2	2	3
Albuminuria, ...	—	—	—	—	4	—	3	—	7	10
Torn Perineum, ...	1	—	—	15	46	4	13	39	118	98
Abortion (actual or threatened), ...	1	—	—	3	2	—	—	6	12	17
Pyrexia, ...	2	—	—	4	7	2	3	3	21	15
Phlebitis, ...	—	—	—	—	—	—	—	3	3	—
Excessive Vomiting, ...	—	—	1	2	1	—	—	—	4	1
Debility and extreme weakness, ...	—	—	—	8	12	—	1	7	28	17
Oedema, ...	—	—	—	—	—	—	1	—	1	6
Other Defined Causes, ...	—	—	—	2	4	2	—	3	11	12
Ill-defined Causes, ...	1	—	1	4	5	1	5	3	20	22
<i>Child—</i>										
Still-birth, ...	—	—	3	2	8	—	4	2	19	18
Premature Child, ...	—	—	—	6	5	2	2	1	16	14
Ophthalmia Neonatorum, ...	—	—	1	2	—	—	2	1	6	1
Discharging Eyes, ...	—	—	1	—	1	—	2	2	6	18
Congenital Malformation, ...	—	—	1	—	1	1	—	2	5	2
Spina Bifida, ...	—	—	1	—	1	—	—	1	3	2
Convulsions, ...	—	—	—	—	—	—	—	—	—	2
Debility and extreme weakness, ...	—	—	—	2	3	—	1	3	9	8
Skin Condition, ...	—	—	—	—	1	—	—	—	1	—
Death of Infant, ...	—	—	—	2	—	—	—	1	3	—
Others, ...	—	—	1	2	3	—	—	5	11	15
	19	—	66	191	360	35	63	186	920	869



## MATERNITY HOMES.

The following three Maternity Homes were inspected and found to be kept satisfactorily.

(1) Fairhaven, Lanark.—Eighty-six confinements were conducted, 80 by a doctor and 6 by the Matron. There were three infantile deaths and one still-birth. Two patients were removed to the County Hospital, Motherwell, on account of puerperal pyrexia.

(2) Limekilns, East Kilbride.—Two cases.

(3) 9 Langshaw Crescent, Carluke.—No cases.

### MEDICAL CARE AND NURSING OF SICK POOR.

The number of persons who received outdoor medical relief in the Council's area is not available, but there were over 15,000 persons on the Poor Law Roll liable to receive medical relief.

The number of County poor persons who received medical treatment in Poor Law Institutions was as follows :—

Institution.			Admitted.	Discharged.	Died.
Omoa House,	...	...	259	248	67
Crosslaw Home,	...	...	43	29	14
Thrashbush Home,	...	...	35	24	5
Old Monkland Home,	...	...	10	8	2
Hamilton Home,	...	...	118	70	20
Total,			465	379	108

In addition to the above, 283 cases were admitted to outside Institutions for whom the County of Lanark admitted liability.

The Annual Reports of the Medical Officers of Omoa House and Crosslaw Home are printed as Appendices to this report. Thrashbush Home, Old Monkland Home and Hamilton Home are combined institutions, and are dealt with by the Medical Officers of the Burghs concerned.

The question of the provision of a General Hospital to deal with sick poor persons requiring institutional treatment instead of treating them as at present in wards set aside in the various Poor Law Institutions is still under consideration.

The scheme for the domiciliary medical care of the sick poor approved by the County Council in 1935 is printed on pages 99-101 of the 1935 report.

*Eye Clinic.*—In view of the lack of uniformity in the various District Council areas in the method of procedure in dealing with cases of defective vision, and having regard also to the desirability

of having such cases dealt with by a qualified Ophthalmic Surgeon, the County Council early in the year approved a proposal to set up a Clinic at the Out-patient Department, County Hospital, Motherwell, under the direction of an Ophthalmologist. Public Assistance Medical Officers were asked to refer to this Clinic all refraction cases and any other patients who in their opinion should be seen by an Eye Specialist. It was arranged that the Clinic be held once a month, but the numbers requiring to be dealt with soon made it necessary to have two sessions monthly. Later it was found necessary to have a weekly Clinic.

From the 4th May (when the first session was held) until the end of the year, 100 patients had been dealt with at the Clinic and 6 cases who were unable to travel to the Clinic were seen in their own homes. Ninety-two of these patients were supplied with glasses and the others received appropriate medical treatment. The age and sex of the patients dealt with were as follows :—

15-25		25-35		35-45		45-55		55-65		65		Total.	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
2	1	1	5	2	9	9	16	11	8	18	24	43	63
												106	

No. of sessions,	...	...	...	...	...	...	25
Total number of visits paid by those 100 cases,	...	...	...	...	...	...	227
Total number of visits paid to the 6 cases,	...	...	...	...	...	...	13

# MILK (SPECIAL DESIGNATIONS) ORDER (SCOTLAND), 1936, AND ATTESTED HERDS.

On 31st December, 1937, the number of licence-holders in the County of Lanark was as follows :—

## *Producer's Licence—*

Certified milk,	...	...	...	...	...	19
Tuberculin Tested milk,	...	...	...	...	...	61
Standard milk,	...	...	...	...	...	2
Pasteurised milk,	...	...	...	...	...	1

## *Dealer's Licence—*

Certified milk,	...	...	...	...	...	5
Certified milk and Tuberculin Tested milk,	...	...	...	...	...	9
Certified milk, Tuberculin Tested milk and Pasteurised milk,	...	...	...	...	...	3
Tuberculin Tested milk,	...	...	...	...	...	16
Tuberculin Tested milk and Pasteurised milk,	...	...	...	...	...	2
Pasteurised milk,	...	...	...	...	...	29

There were 65 Attested Herds, 56 of which hold licences under the Milk (Special Designations) Order, the remaining 9 being non-graded.

The list of licence-holders with tubercle-free herds is given in the report of the County Veterinary Inspector, and shows the average number of animals in the herd and the estimated number of gallons of milk produced per annum.

The following table gives the results of bacteriological examination of samples of graded milk taken during the year :—

No. of Bacteria per ml.			Certified.	Tuber- culin Tested.	Attested Herds (Non- graded).	Standard.	Pasteur- ised.	T.T. Pasteur- ised.
Under	30,000,	...	44	263	11	5	3	8
„	100,000	...	3	49	7	1	2	—
„	200,000	...	—	17	3	1	—	—
Over	200,000	...	5	38	3	1	—	—
			52	367	24	8	5	8
Coliform Bacilli pre- sent in one-tenth of a ml., ...			14	—	—	—	1	2
Coliform Bacilli present in one- hundredth of a ml., ...			—	38	3	1	—	—

Of the 440 samples of graded milk taken, 359 or 81·5 per cent. complied with the bacteriological requirements of the Milk (Special Designations) Order; 81 samples did not comply in the following respects:—

26 exceeded the bacterial count.

34 showed the presence of coliform bacilli.

21 exceeded the bacterial count and coliform bacilli were also present.

The samples which did not conform to the bacteriological requirements were obtained from 39 producers and 8 dealers. There were, therefore, 44 producers of graded milk in the County whose milk samples were found to be free from bacteriological contamination throughout the year.

The following table gives the results of chemical examination of graded milk taken during the year:—

Milk Fat per cent.	Certified.	Tuberculin Tested.	Attested Herds (Non-graded).	Standard.	Pasteurised.	T.T. Pasteurised.	Non-fatty Solids per cent.	Certified.	Tuberculin Tested.	Attested Herds (Non-graded).	Standard.	Pasteurised.	T.T. Pasteurised.
Under							Under						
3·0	1	2	—	—	—	—	8·5	—	4	1	1	—	—
3·0	—	1	1	—	—	—	8·5	3	8	1	1	—	—
3·1	—	2	1	1	—	—	8·6	2	32	1	1	2	—
3·2	1	3	—	1	—	—	8·7	8	47	3	3	3	1
3·3	1	7	—	—	—	1	8·8	8	67	2	1	7	2
3·4	1	10	—	1	—	—	8·9	10	83	6	2	6	3
3·5	1	19	—	2	1	1	9·0	10	62	5	—	2	1
3·6	4	41	3	—	5	—	9·1	8	44	5	—	1	2
3·7	5	41	—	—	3	—	9·2	1	19	1	—	—	—
3·8	11	33	4	1	6	3	9·3	—	9	—	—	—	—
3·9	10	48	1	—	4	2	9·4	1	1	—	—	—	—
4·0	16	170	15	3	2	2	9·5	—	1	—	—	—	—
and over							and over						
—	51	377	25	9	21	9	—	51	377	25	9	21	9

From the foregoing table, it will be seen that 33 samples of graded milk did not comply with the milk fat standard of 3·5 per cent. These samples were taken from 18 producers and 4 dealers. The matter was taken up with the producers concerned, and subsequent sampling showed that the standard was being complied with.

Sixty-five producers complied with the standard for milk fat on all occasions throughout the year.

### CLEANLINESS OF NON-GRADED MILK.

During the year, 859 samples of milk were taken by the Food and Drugs Inspectors for examination in the Chemical Laboratory by the methylene blue reduction test. A sample taken during the months May to October is regarded as satisfying the test if it fails to decolourise the methylene blue in  $4\frac{1}{2}$  hours, and a sample taken during the months November to April is regarded as satisfactory if it fails to decolourise the methylene blue in  $5\frac{1}{2}$  hours.

This test is adopted by the Ministry of Health in England for Graded Milk instead of the bacterial count which is adopted in Scotland. In order to gain experience of the test and obtain an indication of the cleanliness of the general milk supply, we have applied it to ordinary milk samples, and the following statement summarises the results :—

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Number Satisfactory,	86	75	92	77	59	43	14	16	42	36	38	21	599
Number Unsatisfactory,	30	23	7	34	45	30	27	46	11	2	3	2	260
Percentage Unsatisfactory,	25·8	23·4	7·0	30·6	43·2	41·1	65·8	74·2	20·7	5·2	7·3	8·7	30·2

No action was taken as regards 46 of the samples found unsatisfactory as the results were just outwith the standard laid down, indicating there was no gross contamination. The remaining 214 samples were taken from 209 producers who were all communicated with. A visit was also paid to the farms concerned by the Sanitary Inspector, and advice given as to methods and cleanliness of equipment. At the same time, the farmer was afforded an opportunity of sending in further samples for examination. Seventy-three farmers took advantage of this opportunity and the results of these examinations proved satisfactory, although in some cases repeat samples had to be taken before the desired results were obtained.

### MILK SUPPLIED TO SCHOOL CHILDREN.

Seventy-two samples were taken from supplies on delivery to the bottling premises, and 16 of these samples did not comply with the bacteriological standard for graded milk in the following respects :—

- 7 exceeded the bacterial count.
- 3 showed the presence of coliform bacilli.
- 6 exceeded the bacterial count and coliform bacilli were also present.

Three of the samples which did not comply with the standard were procured from producers in Lanarkshire and 13 on delivery from producers in neighbouring counties.

Seventy-one bottles of milk were procured on delivery to schools and 38 samples did not conform to the standard for graded milk in the following respects :—

- 8 exceeded the bacterial count.
- 10 showed the presence of coliform bacilli.
- 20 exceeded the bacterial count and coliform bacilli were also present.

Fourteen of the unsatisfactory samples were from Lanarkshire farms, 17 from farms in neighbouring areas and the sources of 7 samples were not known.

Some of the results of bacteriological examination are disappointing, but this is to a very great extent due, especially in hot weather, to the time elapsing between milking and the delivery of milk to the pupils, *e.g.*, 22.2 per cent. of the samples taken



on delivery to the bottling premises were unsatisfactory, whereas 53·5 per cent. of the samples were unsatisfactory when taken at the school.

The following table shows the results of the bacteriological examinations carried out :—

#### BACTERIOLOGICAL EXAMINATION OF SCHOOL MILK SUPPLIES.

No. of Bacteria per 1 ml.	Jan. to Mar.		Apr. to June.		July to Sept.		Octr. to Decr.		Total.	
	Bulk.	Bottled.	Bulk.	Bottled.	Bulk.	Bottled.	Bulk.	Bottled.	Bulk.	Bottled.
Under 30,000,	12	3	5	15	4	1	17	8	38	27
„ 100,000,	8	—	2	7	2	2	7	5	19	14
„ 200,000,	—	—	—	1	—	—	2	1	2	2
Over 200,000,	2	—	10	27	—	1	1	—	13	28
	22	3	17	50	6	4	27	14	72	71
Coliform Bacilli present in one- hundredth of a ml., ... ..	—	1	6	27	—	1	3	1	9	30

The following table gives the result of chemical examination of 146 samples as delivered to the various schools and dealers :—

Milk Fat per cent.	No.	Solids not Fat	
		per cent.	No.
2·2	1	8·0	1
2·7	1	8·1	1
2·8	1	8·4	1
2·9	3	8·5	3
3·0	1	8·6	9
3·1	3	8·7	16
3·2	3	8·8	22
3·4	8	8·9	39
3·5	13	9·0 and over	54
3·6	9		
3·7	17		146
3·8	14		
3·9	14		
4·0 and over	58		
	146		

It will be noted that 21 samples did not comply with the milk fat standard for graded milk, viz., 3·5 per cent. One producer was prosecuted under the Food and Drugs Act, and a fine of £4 imposed. In connection with the other deficient samples, the producers concerned were communicated with, and subsequent sampling showed that the standard was being complied with.

### VETERINARY INSPECTION OF DAIRY HERDS.

To enable all the dairy herds in the County being inspected three times in each year, two additional temporary Veterinary Surgeons are appointed from 1st November to 30th April.

The number of animals detected suffering from tuberculosis of udder amounted to 124, compared with 95 in the previous year.

Under the Milk and Dairies (Scotland) Act, 1914, it is an offence to sell milk from a cow suffering from any disease liable to infect or contaminate the milk. The number of animals giving milk found to contain infectious organisms other than tubercle, amounted to 174, compared with 193 in the previous year.

The following tabular statement shows the work carried out during the year :—

Herds registered,	...	...	...	...	1,305
Herds inspected,	...	...	...	...	3,694
Cows examined,	...	...	...	...	89,763

#### Cows with abnormal condition of udder :—

Tuberculosis,	...	...	...	...	124
Atrophy,	...	...	...	...	4,520
Mammitis,	...	...	...	...	1,337
Induration, non-tuberculous,	...	...	...	...	1,628
Eruption on teats,	...	...	...	...	53

#### Samples of milk :—

Number taken,	...	...	...	...	1,654
Number found to contain tubercle bacilli (including group and duplicate samples),	...	...	...	...	*137
Number found to contain other infectious organisms (including group samples),	...	...	...	...	†181
Number negative,	...	...	...	...	1,334

\* Taken from 124 cows.

† Taken from 174 cows.

Further details regarding the work carried out will be found in the Annual Report of the County Veterinary Inspector.

# Report of the Sanitary Inspector.

## HOUSING.

The administrative procedure during the year 1937, which was summarised in the information supplied to the Department of Health for Scotland, in terms of the Regulations under the Housing Acts, is given in the following tabular statement and subsequent paragraphs :—

Number of dwelling-houses inspected, ... ..	3,267
Number of dwelling-houses found to be unfit for human habitation, ... ..	478
Number of dwelling-houses in respect of which Notices were served under Section 14 (1) of 1930 Act, ... ..	11
Number of dwelling-houses rendered fit following Notices under Section 14 (1), ... ..	—
Number of dwelling-houses in respect of which a Demolition Order or Closing Order under Section 16 (3) has been substituted for a Notice under Section 14 (1), ... ..	30
Number of dwelling-houses in respect of which Notices were served in terms of Section 16 (1), ... ..	369
Number of dwelling-houses in respect of which undertaking has been given that the house will not be used for human habitation until it has been rendered so fit, ... ..	17
Number of dwelling-houses in respect of which Demolition Orders have been made under Section 16 (3), ... ..	726
Number of dwelling-houses in respect of which Closing Orders have been made under Section 16 (3) and (4), ... ..	25
Number of dwelling-houses rendered fit following on undertakings under Section 16 (2) :—	
(i) With assistance under Housing (Rural Workers) Acts, 1926 and 1931, ... ..	3
(ii) Without such assistance, ... ..	3
Number of dwelling-houses rendered fit for human habitation at instance of County Council without formal notice under Housing (Scotland) Act, 1930 :—	
(i) With assistance under Housing (Rural Workers) Acts, 1926 and 1931, ... ..	52
(ii) Without such assistance, ... ..	—

The general character of the defects usually found to exist in the dwelling-houses dealt with was principally dampness, due to various defects in construction; broken plasterwork, floors, etc.; and the want of proper domestic and sanitary conveniences.

Although no action was taken by the Local Authority under Section 20 (1) of the Housing (Scotland) Act, 1925, and Section 40 (1) of the Housing, Town Planning, etc. (Scotland) Act, 1919, it should be explained that the Local Authority have taken action for the introduction of (a) sinks, water supply, and water-closets at 9 dwellings; (b) sinks and water supply at 14 dwellings; (c) water-closets at 218 dwellings; all in terms of Section 246 of the Burgh Police (Scotland) Act, 1892, as applied to the County of Lanark by Section 68 (1) of the Lanarkshire County Council (Water, etc.) Order Confirmation Act, 1917, and the work was completed in a satisfactory manner in the following cases (a) 3 dwellings; (b) 4 dwellings; and (c) 68 dwellings.

No schemes under Part I of the Housing (Scotland) Act, 1930, relating to Clearance or Improvement of Unhealthy Areas, or Part I of the Act of 1935, relating to Re-development Areas, were in contemplation.

### **Slum Clearance.**

*Demolition Orders.*—Further progress was made during the year towards the removal of insanitary houses. Representations under Section 16 (1) of the Housing (Scotland) Act, 1930, that an additional 522 dwellings were unfit for human habitation, and not capable, at a reasonable expense, of being rendered so fit, were submitted to the Local Authority, and Demolition and Closing Orders were made in respect of 751 houses, including cases continued from the previous year.

Representations were also submitted, in terms of Section 14 (1) of the Act to the effect that 30 dwellings were unfit for human habitation, but were capable at a reasonable expense, of being rendered so fit, and statutory notices were served on the person or persons having the control of the houses requiring them to execute the works specified in the representation. The owners of the dwellings subsequently made application to the Local Authority, in terms of Section 17 of the Housing (Scotland) Act, 1930, to substitute, for the notice which had been served, a Demolition Order under Sub-

Section (3) of Section 16 of the Act. The Local Authority, after consideration of each case, were satisfied that it was reasonable to comply with the request, having regard to the estimated cost of the works requiring to be carried out on the houses, the condition of the houses, and other circumstances of the case, and a Demolition Order was accordingly made.

*Undertakings.*—During the year Undertakings, under Section 16 (2) of the Act, were accepted from the owners that 17 dwelling-houses would not be used for human habitation until the Local Authority, on being satisfied that they had been rendered fit, cancelled the Undertaking.

The situation and size of the 798 houses dealt with by Demolition Orders, Closing Orders, and Undertakings during the year are given in Appendix I.

*Displacement of Persons.*—During the year 661 additional Improvement Scheme houses, a reduction of 38 on the previous year, were completed and occupied by tenants from slum dwellings, the number of persons displaced being 3,510. There were also 196 persons removed to vacancies in 52 Improvement Scheme houses of earlier construction, making a total of 3,706 persons rehoused in 713 new dwellings.

The location and number of new houses allocated, and the number of persons displaced is shown in Appendix II.

The total number of new houses completed under the Housing Act of 1930 and occupied was 3,521. There were also, at the close of the year under review, 1,229 new houses in various stages of construction.

*Housing conditions in temporary erections.*—In connection with the question of the provision of houses for families living in temporary erections set down within the County, a Sub-Committee remitted to the County Medical Officer and County Sanitary Inspector to report on those erections which could be dealt with under Section 71 of the Housing (Scotland) Act, 1935. A number of families housed in caravans and similar makeshift dwellings were thereafter visited along with the County Building Inspector and the following general observations were submitted for the consideration of the Committee:—

“As a result of the problems created by existing caravan dwellers we would recommend that any person who in future

attempts to set up a permanent dwelling in a structure that does not conform to the Building By-laws should be refused permission to do so, and in defiance thereof should be prosecuted.

“ There are approximately 70 families living in the County as permanent residents in caravans, huts, and similar structures. Their habitations present a variety of problems from the point of view of health, but this variation is based almost entirely on individual enterprise. From a common standpoint they are practically all unfit for human habitation and should not be permitted.

“ We are agreed in this view, but have difficulty in deciding what priority should be given to these people in the matter of rehousing. There are instances of old men living alone who suffer relative misery but prefer their individual freedom to the comforts of the ‘ big house.’ There are cases of families living under wretched conditions who do so for the sake of saving rent because the parents are irresponsible to the needs of their children. There are families who have enjoyed the benefits of a County house and have been evicted for the non-payment of rent. The parents are prepared to accept their new conditions for what they save in rental. There are here and there unfortunate families who could not get a house and were driven by immediate circumstances to caravan dwelling. There are inveterate slum dwellers who will present a problem in rehousing under any conditions. There are a few enterprising individuals usually with no family or with only one or two children who are living in health and comfort in spite of the meagre facilities available to them.

“ All these temporary dwellings should ultimately be abolished, and, in the meantime, we recommend that certain cases, especially those in which young children are being reared in conditions of squalor, should be dealt with at the discretion of the Public Health Department under Section 71 of the Housing (Scotland) Act, 1935, when suitable alternative accommodation is available.”

The matter was remitted to the officials to deal with.

*Prosecution of “ Squatters.”*—Legal proceedings were instituted against four families for taking possession without permission of



premises which had been the subject of demolition orders at Rose Cottage, Thankerton, 10 Watson Street, Blantyre, and 9 and 11 Montgomery Place, Larkhall. Fines ranging from £3 to £1 were imposed on the squatters.

### Overcrowding.

The housing situation is growing worse in the populous districts of the County. Sub-letting is on the increase and the slow building progress is aggravating the situation.

There are about 2,000 marriages a year in the County and no provision is being made for the proper housing of the majority of newly-married couples. Consequently they have no alternative but to rent rooms, often at extortionate rates, and thus add to the general overcrowding.

While satisfactory progress has been made generally with the procuring of sites for the houses already approved of, building operations have not proceeded as fast as was anticipated owing to difficulties which have arisen relative to the supply of labour—particularly bricklayers—materials, etc. Alternative methods of construction were, therefore, suggested, and after consideration, the Local Authority approved of the erection of a number of houses by the Whatling system of concrete house construction. A start has been made on 44 such houses at Salsburgh.

During the year 295 new houses were completed and occupied and an additional 1,057 houses were in various stages of construction throughout the County.

From the date of the Overcrowding Survey to the end of 1937, 541 cases of overcrowding, involving 2,693 persons, have been relieved as a result of action taken by the Local Authority. The number of houses in which overcrowding has been relieved during the same period was (a) privately-owned houses, 378 ; and (b) Local Authority houses, 130. Eighty-five overcrowded families included in (a) and (b) have been rehoused in privately-owned houses.

New cases of overcrowding reported totalled 20, and there were 36 known cases in which dwelling-houses have again become overcrowded after having been relieved by the Local Authority.



Altogether there were on our register at the end of the year 20,726 overcrowded dwelling-houses containing 24,584 families with a total of 110,005 persons.

*Provision of Beds and Bedding.*—In accordance with the scheme adopted in December, 1936, for the provision of beds and bedding to tenants removing to Council houses from insanitary or overcrowded dwellings and cases where there were tuberculous patients, 1,084 oak bedsteads and 828 sets of bedding were supplied during the year, mostly all under Hire Purchase Agreement.

### **Insanitary Dwellings.**

With regard to the question of the provision by owners of a separate water-closet for each dwelling-house, no difficulty need arise in respect of inadequacy of a water supply, as there is an abundance in all populous areas. Conditions are also improving in rural areas as the "County" supply is reaching many of these outposts. The question of sewage disposal, however, in certain districts is of paramount importance and this matter is presently engaging the attention of the Local Authority.

As to practical, structural or environmental difficulties, these still arise, particularly in relation to old properties, but they are, in the course of time, overcome when houses of a doubtful nature are classified and dealt with according to their condition.

In several cases the owner's financial circumstances continue to deter progress so far as sanitary improvements are concerned and certain owners are quite prepared to relinquish their interest in preference to incurring the necessary expense.

Many houses are beginning to show signs of deterioration and the owners do not seem inclined to do other than provide bare maintenance. The inexpedience of improving old houses showing excessive wear and tear seems justifiable, as their restoration to a proper standard of fitness is far from being a reasonable and economic proposition.

The Department has continued to press for the introduction of modern domestic and sanitary conveniences, and, during the year, numerous inspections were made and meetings held with the owners of properties. Difficulties are still being experienced, in view of the

continued high cost of carrying out improvements, but, in spite of this, some further progress has been made. The properties are briefly referred to as under :—

*Chapel Cottage, by Sandford.*—This three-apartment dwelling was provided with bathroom and septic tank.

*Cloverhill Cottage, Strathaven.*—This five-apartment dwelling was provided with bathroom and septic tank.

*Strathaven Road, Sandford.*—Two water-closets, together with an improvement to the septic tank, were provided for the 2 three-apartment dwellings here.

*9-13 and 15-25 Broompark Road, High Blantyre.*—19 one-apartment, 3 two-apartment, and 2 three-apartment dwellings without adequate water-closet accommodation. A meeting was held on the ground, and at the close of the year the factors indicated that they would prepare plans to be submitted for the consideration of the Committee.

*66-74 Clydesdale Street, Mossend.*—1 one-apartment, 11 two-apartment, 4 three-apartment dwellings, and 3 shops. Nine water-closets were provided at this property, in the proportion of one convenience between each two dwellings, and one for the three shops.

*76-84 Clydesdale Street, Mossend.*—5 two-apartment dwellings and three shops. Four water-closets were provided for this property.

*Hill Place, 114-118 Clydesdale Street, Mossend.*—Negotiations are in progress for improvements to be carried out to these four 2-apartment dwellings under the Housing (Rural Workers) Acts.

*Roselea Cottage, 150-152 Clydesdale Street, Mossend.*—One water-closet was provided for these 2 two-apartment dwellings.

*Jubilee Place, 154-160 Clydesdale Street, Mossend.*—Two water-closets were provided for these 4 two-apartment dwellings.

*Commercial Place, 179-203 High Street, Newarthill.*—1 one-apartment, 4 two-apartment, 3 three-apartment, and 1 five-apartment dwellings and 2 shops. Plans have been approved for the provision of 5 water-closets for this property, and, as the five-apartment dwelling already

has a convenience, the ratio will be one water-closet between each two dwellings and one for the two shops. Owing to certain difficulties between the owners of the property, the work had not been commenced at the end of the year.

205-221 *High Street, Newarthill*.—4 two-apartment and 1 five-apartment dwellings and 3 shops. The five-apartment dwelling already has a bathroom with water-closet, and plans have now been approved of for the provision of four additional water-closets, two between the three dwellings on the upper floor, one for the ground floor dwelling, and one between the three shops. The work had not been commenced at the end of the year.

76-78 *Carfin Street, New Stevenston*.—1 two-apartment and 1 three-apartment dwellings. A bathroom, with water-closet and wash-hand basin, was provided for each of these dwellings.

395-403 *Main Street, Bellshill*.—4 two-apartment dwellings and three shops. Four water-closets were provided here.

30 *Hope Street, Bellshill*.—1 one-apartment, 5 two-apartment, and 2 three-apartment dwellings. Two additional water-closets were asked for here, but at the end of the year the work had not been commenced.

16 *Sweethill Terrace* and 5-10 *Park Place, Carnbroe*.—A water-closet was provided for each of these 21 two-apartment dwellings.

14-24 *Orbiston Road, Bellshill*.—9 one-apartment and 1 two-apartment dwellings and 1 shop. Six water-closets were provided here.

463-473 *Main Street, Bellshill*.—Ten two-apartment dwellings and three shops. Three additional water-closets were provided here.

*Kirkton Cottage, Cadder*.—This two-apartment dwelling was provided with an inside sink and water supply, also a water-closet.

247 *Hamilton Road, Cambuslang*.—2 one-apartment and 2 two-apartment dwellings. One additional water-closet was provided here, and, with the existing water-closet, gives one convenience for each two dwellings.

227 *Wishaw Road, Waterloo*.—This two-apartment dwelling was provided with an inside sink and water supply, and also a bathroom with water-closet. New drains were laid and connected to the sewer.

*Burnside Villa, 380-382 Castlehill Road, Gowkthrapple*.—3 two-apartment and 1 three-apartment dwellings. Two outside water-closets were provided for this property. New drains and a septic tank were provided.

131b *Main Street, Overtown*.—A bathroom with water-closet, bath and wash-hand basin was provided for this four-apartment dwelling.

20 *Kirk Road, Carluke*.—This three-apartment dwelling was provided with a bathroom with water-closet and bath.

44-48 *Belstane Road, Carluke*.—1 two-apartment and 1 three-apartment dwellings. At the close of the year, negotiations were in progress for the erection of sculleries with inside sinks and water supply and a water-closet for each of the two dwellings.

88-90 *Braidwood Road, Braidwood*.—1 three-apartment and 1 four-apartment dwellings. Each of these dwellings was provided with a water-closet and the inside sinks renewed. New drains and a septic tank were provided.

*Gowanglen, by Carluke*.—A bathroom, with water-closet, bath and wash-hand basin, was provided for this four-apartment dwelling, also new drains and a septic tank.

18 *Boghall Road, Braidwood*.—A bathroom with water-closet and wash-hand basin was provided for this two-apartment dwelling. New drains were laid and a connection made to the sewer.

*Linnside Cottage, by Carluke*.—This dwelling, comprising two rooms and two attics, was provided with a scullery with inside sink and water supply, and a bathroom with water-closet and bath. New drains and a septic tank were provided.

93 *Lawhill Road, Law*.—A water-closet was provided for this two-apartment dwelling.

1-1a *Station Road, and 2 Lawmuir Road, Law*.—3 two-apartment and 1 three-apartment dwellings, with shop attached to the latter. A new bathroom containing a bath, wash-hand basin and water-closet was provided for the three-apartment dwelling, and two water-closets for the remaining three houses.

10-12 *Brownlee Road, Law*.—A bathroom containing water-closet and wash-hand basin was provided for each of the 2 two-apartment dwellings here.

*Co-operative Building, Lawhill Road, Law*.—An outside water-closet situated on the enclosed stair-landing was provided for the two three-apartment dwellings here.

*Broom View, Douglas Water*.—The work of providing an inside water-closet to this two-apartment dwelling is presently proceeding.

*Glenside Cottage, Douglas Water*.—An inside water-closet is presently being installed in this three-apartment dwelling.

*Greenside, Carmunnock*.—3 two-apartment and 1 three-apartment dwellings. Inside sinks and water supply were provided and the drainage system reconstructed.

*Pinewood Cottage, Forth*.—An inside water-closet was provided for this three-apartment dwelling.

*Station House, Carnwath*.—This four-apartment dwelling was provided with a bathroom and new drainage system.

14 *Railway View, Carstairs*.—This three-apartment dwelling was provided with a scullery and bathroom.

96 *Lanark Road, Carstairs*.—A bathroom was provided for this two-apartment dwelling.

*Viewpark, Carstairs Junction*.—A bathroom was provided for this five-apartment dwelling.

*Brae Cottage, Coulter Estate, Coulter*.—This two-apartment dwelling was provided with an outside water-closet.

*Main Lodge, Coulter House, Coulter*.—This four-apartment dwelling was provided with a bath, water-closet and new drainage system.

*Newton House, Elvanfoot.*—Proposals were received and approved for the provision of a water-closet, sink and drainage system for the three-apartment dwelling at the Lodge here. Work had not been commenced at the close of the year.

*Gamekeeper's Cottage, Hass Farm, Leadhills.*—This four-apartment dwelling was provided with a water-closet, bath and new drainage system.

*Flexholm, Leadhills.*—This two-apartment dwelling was provided with a water-closet and new drainage system.

*Station Road, Leadhills.*—A two-apartment dwelling here was provided with water-closet, sink and drainage system.

65-81 *Victoria Street, Larkhall.*—12 two-apartment dwellings. Three additional water-closets were provided, and, with the three existing conveniences, the ratio is now one between each two dwellings.

*Sliddery, Douglas.*—5 one-apartment, 9 two-apartment and 1 three-apartment dwellings referred to in last Annual Report. The reconditioning of these dwellings is still under consideration, but at the close of the year no proposals had been received.

*Townhead, Douglas.*—A water-closet was provided for each of the 4 three-apartment dwellings here.

*Loaningfoot, Douglas.*—A water-closet was provided for the two dwellings here, 1 one-apartment and 1 two-apartment.

*Crosshill Cottage, East Kilbride.*—This two-apartment dwelling was provided with bathroom and septic tank.

*Newhousemill Cottages, East Kilbride.*—Two water-closets were provided for these 4 two-apartment dwellings.

*Jackson's Cottage, Heads, Glassford.*—A water-closet, with septic tank, was provided for this two-apartment dwelling.

6 *New Road, Chapellton.*—This three-apartment dwelling was provided with bathroom and septic tank.



11 *Wellbrae, Chapelton*.—This three-apartment dwelling was provided with bathroom and septic tank.

32 *Millar Street, Glassford*.—The owner of the 2 two-apartment dwellings here has been requested to provide water-closet accommodation, but at the close of the year no proposals had been received.

48 *Millar Street, Glassford*.—2 two-apartment dwellings. Negotiations are still proceeding for the provision of water-closet accommodation at this property.

*The Castle, Quarter*.—An inside sink and water supply and water-closet were provided for each of these 8 two-apartment dwellings.

36-64 *Limekilnburn Road, Quarter*.—14 two-apartment and 1 three-apartment dwellings. Inside water-closets have been provided for eight of these dwellings, and work is proceeding on the remainder.

*Brown Terrace, Quarter*.—4 two-apartment and 2 three-apartment dwellings. The work of providing an inside water-closet to each of these dwellings is presently proceeding.

*Marshall Place, Quarter*.—4 two-apartment, 1 three-apartment, and 1 four-apartment dwellings. An inside water-closet for each of these dwellings is in course of being provided.

*Blair Terrace, Quarter*.—6 two-apartment dwellings. The work of providing an inside water-closet to each of these dwellings is presently proceeding.

*Meikle Earnock Dairy, Hamilton*.—A bathroom and scullery with inside sink and water supply was provided for the four-apartment dwelling here.

*Mousemill, Lanark*.—The work of providing a bathroom to this five-apartment dwelling is presently proceeding.

*Westend Cottage, Kirkmuirhill*.—This three-apartment dwelling was provided with inside sink and water supply, water-closet, and new drainage system, and a connection made to the sewer.

*Linside Cottage, Crossford*.—A bathroom was provided for this four-apartment dwelling.



*Roadhead Farm Cottage, Libberton.*—This two-apartment dwelling was converted into one of three-apartments, and a scullery and water-closet provided.

*Bogmuir Bothy, Libberton.*—A water-closet was provided for this two-apartment dwelling.

*Rose Cottage, Luggiebank.*—A bathroom with water-closet was provided for the three-apartment dwelling and a water-closet for the two-apartment dwelling.

*Curling Pond Cottage, Cairnhill, by Airdrie.*—This four-apartment dwelling was provided with a new bathroom also inside sink and water supply.

*Glen Mill Cottage, Riggend.*—A new bathroom was provided for this four-apartment dwelling.

172-174 *Main Street, Plains.*—Each of these two-apartment dwellings was provided with an inside water supply.

108-116 *Main Street, Plains.*—4 two-apartment dwellings with shop attached. Two outside water-closets were provided here.

120-128 *Main Street, Plains.*—1 one-apartment, 5 two-apartment, and 1 four-apartment dwellings. Four outside water-closets were provided here.

345-351 *Main Street, Greengairs.*—A water-closet was provided for each of these four two-apartment houses.

62-70 *Coatbridge Road, Glenmavis.*—A water-closet was provided for each of these 5 three-apartment dwellings.

190-212 *Main Street, Caldercruix.*—Three outside water-closets were provided for these 8 two-apartment houses.

42 *Bredisholm Road, Baillieston.*—5 two-apartment dwellings and one shop. Four water-closets were provided for this property, in place of one existing water-closet. Later three of the two-apartment dwellings were converted into two three-apartment dwellings.

*Rankine's Cottage, Hollandhurst.*—A water-closet was provided for this four-apartment dwelling.

*581 Coatbridge Road, Bargeddie.*—A bathroom with water-closet and wash-hand basin was provided for this four-apartment dwelling.

*Church Place, 7-25 Main Street, Glenboig.*—10 one-apartment dwellings. Four outside water-closets and an additional water tap are proposed by the owners, but at the end of the year the work had not been commenced.

*Carrick Place, Glenboig.*—3 three-apartment, 7 two-apartment, and 11 one-apartment dwellings. The owners propose to provide 6 outside water-closets, but at the close of the year the work had not commenced.

*Garnqueen Square, Glenboig.*—16 one-apartment and 15 two-apartment dwellings. The provision of an inside sink and water supply for each house, an inside water-closet for each two-apartment dwelling, and one water-closet between each two one-apartment dwellings is still under discussion.

*3-5 Burnbrae Road, Shotts.*—1 two-apartment and 1 four-apartment dwellings. A water-closet was provided for each of these dwellings.

*7 Rosehall Road, Shotts.*—A water-closet, together with new drainage system, was provided for this three-apartment dwelling.

*234-240 Station Road, Shotts.*—8 two-apartment dwellings. Plans for the provision of water-closet accommodation at this property have been received, but at the close of the year the work had not been commenced.

*53 Springhill Road, Shotts.*—A bathroom and water-closet were provided for this four-apartment dwelling.

*Belmont Croft, Shotts.*—Each of the 4 two-apartment dwellings here was provided with inside sink and water supply and also a water-closet for each house.

*2 Wishaw Low Road, Cleland.*—A bathroom with water-closet has been provided for this two-apartment dwelling.

155-157 *Hamilton Street, Torbothie, Shotts*.—A bathroom with water-closet was provided for each of the 2 two-apartment dwellings here.

3-9 *Thistle Street, Cleland*.—4 one-apartment and 2 two-apartment dwellings. Negotiations for the provision of water-closet accommodation at this property were in hand, but have been deferred, as the dwellings are outwith the Special Drainage District.

6 *Stonehouse Road, Sandford*.—A water-closet with septic tank was provided for this four-apartment dwelling.

*Post Office Buildings, Symington*.—3 three-apartment dwellings and one shop. The work of providing inside sinks and water supply and water-closets at this property is presently proceeding.

*Glenburn Cottages, Symington*.—An outside water-closet was provided for the two-apartment wooden bungalow here.

*Tintonia, Symington*.—This five-apartment dwelling was provided with a bathroom.

WATER SUPPLY, CLOSET ACCOMMODATION, ETC.—The table in Appendix III shows the number of closets on the conservancy system, as well as the number of privies, etc., remaining at the end of the year ; also the number of houses without water supply, etc. It should be noted, however, that many of the dwellings shown in the table as still having inadequate sanitary conveniences are on the list for closure, under the Local Authority's Scheme for the Improvement of Insanitary Areas, and will be swept away in due course.

### **Accommodation for Seasonal Workers.**

The total intimations received from employers as to the number of workers proposed to be employed was 76, and 9 applications by farmers for the approval of the Local Authority with regard to accommodation were also received during the year. Two of these applications were, however, withdrawn as the farmers concerned afterwards decided to employ local labour. Three applications from employers were refused, as the accommodation proposed for the workers was quite unsuitable.

Numerous visits of inspection were made where seasonal workers were accommodated, the workers being mainly engaged with potato

crops. Generally, the accommodation provided and the other arrangements made for the workers were fairly good. One or two squads of workers were cautioned regarding the keeping clean of their quarters, and on subsequent inspection an improvement was noted.

During the autumn, Miss M'Michael, of the Department of Health, visited the Upper Ward district on two occasions and inspected the arrangements at a number of farms. A Sub-Committee also visited several farms where workers were, or had been accommodated, in preparation for the revision of the existing by-laws referred to in last Annual Report.

*Prosecutions.*—Court proceedings were instituted against three farmers in Lesmahagow Parish in respect that the sanction of the Local Authority had not been obtained to accommodate squads of fruit pickers and that the sleeping accommodation, facilities for storing and preparing of food, were unsatisfactory and that sanitary facilities and water supply were inadequate. A fine of £2 was imposed in each case, and subsequently the farmers concerned submitted proposals for improvement in each detail mentioned. These were approved and the work was completed at the end of the season.

### **Housing (Rural Workers) Acts, 1926 and 1931.**

During the year the survey of dwellings for the accommodation of agricultural workers, and other persons whose economic condition is substantially the same as such workers, was continued, and 47 applications were received for assistance in aid of the reconstruction and improvement of 58 dwellings. A grant was sanctioned by the Local Authority in each case.

*Rural Housing.*—The Report of the Scottish Housing Advisory Committee on Rural Housing in Scotland and Circular No. 95, of date 21st July, 1937, from the Department of Health, were considered in detail by the County Medical Officer, County Sanitary Inspector and County Building Inspector, and the following observations were submitted for the consideration of the Local Authority:—

“ 1. The County Council are asked to inspect each year in the rural areas of their districts not less than one-fifth of the houses of a rateable value of £26 or less. The rural areas of Lanarkshire to which this applies are the following 21 parishes:—

Avondale.	East Kilbride.
Biggar.	Glasford.
Carmichael.	Lamington and Wandel.
Carmunnock.	Lanark.
Carnwath.	Lesmahagow.
Carstairs.	Libberton.
Culter.	Pettinain.
Covington.	Symington.
Crawfordjohn.	Walston.
Dolphinton.	Wiston and Robertson.
Dunsyre.	

It will be observed that the Parish of Crawford is excluded. This is a rural area in every respect except that of agricultural valuation. The value of the agricultural land does not exceed 25 per cent. of the total valuation because this country district happens to include two water works and a considerable mileage of main line railway.

“ 2. There are 7,312 houses of £26 and less rental (excluding houses belonging to the County Council) in the rural areas referred to above.

“ 3. The County Sanitary Inspector's staff has carried out an average of 1,300 inspections per annum in those rural areas during the past six years. This is equivalent to 18 per cent. of the total houses and approximates very closely to the 20 per cent. per annum now required by the Department of Health.

“ 4. A 20 per cent. annual inspection can be achieved without covering the whole problem. The County Sanitary Inspector expresses the view that a 30 per cent. to 40 per cent. inspection is necessary. Allowance has to be made for re-inspection of doubtful cases and for the loss of time spent in visiting isolated houses.

“ 5. The inadequacy of the present inspection in rural areas is suggested by the figures prepared in this Department. The average number of insanitary houses dealt with under Section 16 of the 1930 Act for the whole County is 3.3 per cent. per annum ; the average



number of insanitary houses dealt with in rural areas is 1·3 per cent. per annum ; the average number of new houses completed each year for the whole County was 1·8 per cent. of the total fit houses ; for rural areas the figure was 1·3 per cent.

“ 6. The value of a concentrated survey is illustrated by the results of a special inspection of servants' cottages carried out in 1929. 717 houses were inspected, of which 481 were found to be in some respect unfit for human habitation. All the unfit houses have been dealt with or are in process of being dealt with—45 have been demolished or closed, 396 have been made fit or are being made fit with assistance under the Housing (Rural Workers) Act, and 40 without assistance.

“ 7. An adequate standard of fitness has been observed by officers of the Public Health Department. The need for a uniform system of recording inspections is recognised, and the form prescribed by the Department of Health with suitable additions will be used. The County Sanitary Inspector directs attention to the work entailed in scrutinising these forms, filing them, and supervising their regular completion.

“ 8. A certain amount of information is available as to bothies, and chaumers, but these would have to be the subject of a special investigation.

“ 9. In view of the provisions of the Housing (Agricultural Population) (Scotland) Bill, an immediate survey of farm servants' dwellings is indicated. While this represents only 9 per cent. of the total annual inspections required in rural areas, I would point out that it may represent 50 per cent. of the time of a sanitary officer. Many of the houses are in remote places and the loss of time in travelling is considerable.

“ 10. There is no disposition on the part of the Local Authority to refrain from requiring owners to carry out repairs or improvements if the owner is embarrassed financially. Apart from houses dealt with under Section 16 of the 1930 Act, action has been taken in rural areas by the County Council for the provision of water-closets in 400 houses and inside sinks and water supplies at 263 houses during the years 1931 to 1936.

“ 11. In view of the frequent reference in the report and the circular letter to the subject, the following statement has been prepared showing

the number of houses dealt with year by year under the Housing (Rural Workers) Act :—

Year.	Total Houses.	Two Apt. Houses.	Inside Water Supply.	Inside Water-Closet.	Bath.	Three Apt. & Over.	Inside Water Supply.	Inside Water-Closet.	Bath.
<i>Lower Ward.</i>									
1928,	... 1	—	—	—	—	1	1	1	1
1929,	... 1	1	1	1	—	—	—	—	—
1930,	... 1	—	—	—	—	1	1	1	1
	3	1	1	1	—	2	2	2	2
<i>Middle Ward.</i>									
1928,	... 2	—	—	—	—	2	2	2	1
1929,	... 25	17	16	12	4	8	8	8	8
1930,	... 26	15	15	15	3	11	11	11	5
	53	32	31	27	7	21	21	21	14
<i>Upper Ward.</i>									
1927,	... 5								
1928,	... 8								
1929,	... 67								
1930,	... 94								
	174								
<i>County.</i>									
1930,	... 55	35	35	34	4	20	20	20	8
1931,	... 97	70	70	70	14	27	27	27	12
1932,	... 69	36	36	36	1	33	33	33	13
1933,	... 59	25	25	25	8	34	34	34	14
1934,	... 59	29	29	29	6	30	30	30	17
1935,	... 53	12	12	12	7	41	41	41	41
1936,	... 58	13	13	13	13	45	45	45	45
1937,	... 96	8	8	8	8	88	88	88	88
	546	228	228	227	61	318	318	318	221



The feature of outstanding interest is the gradual and progressive raising of the standard as shown by the increasing number of three-apartment houses and over dealt with, and the insistence of having an inside water supply, inside water-closet, and bath. The figures for 1936 and 1937 show that the Local Authority have anticipated the requirements of the Department of Health.

“ 12. In 60 per cent. of the cases the request for assistance has been due to voluntary application by the owner ; in 37 per cent. the application has been the result of informal approaches by officers of the Public Health Department ; and in 3 per cent. as the result of the serving of a statutory notice.

“ 13. In every case assistance was given by way of a grant, but no information is available in the Public Health Department as to the number of cases that received loans. It has been suggested that more information to owners on this subject would encourage a fuller use of the provisions of the Housing (Rural Workers) Act.

“ 14. The requirements as to inspection and re-inspection as set forth in Appendix III in the circular letter have been observed by this Department since 1930.

The report of the Advisory Committee states that in a number of cases the money spent under the Housing (Rural Workers) Act has not rendered the houses fit in all respects for human habitation. So far as Lanarkshire is concerned this may have been the case in a few instances during the early application of the Act, but the progressive evolution of a high standard of fitness has been demonstrated in paragraph 11 of this report.

“ 15. In the same paragraph reference is made to the need for providing an inside water supply, water-closet, and bath as now required by the Department of Health, and also the minimum requirement of a three-apartment house of suitable floor area unless in exceptional circumstances. The County Building Inspector makes an interesting reference to the provision of a bath. In several dwellings situated in isolated areas it was impracticable to provide a bath because the water supply was drawn from springs at a lower level than the house. In the first instance a pumping arrangement did not seem feasible, but since 1930 this arrangement has been adopted with success.

" 16. The circular letter states that the new arrangements for the inspection of houses in rural areas, including a special survey of farm servants' houses, bothies, and chaumers, should come into operation on 1st January, 1938, and County Councils should take steps to ensure that they have an adequate staff to undertake the inspections.

" There is likely to be a good deal of additional work for the inspectors and the clerical staff, and the outdoor work will take up time disproportionately great to the number of inspections involved. It is anticipated that an increase in staff and readjustment of duties will be required, and a report on this aspect of the problem will be submitted at a later date."

### **Rent and Mortgage Interest (Restrictions) Acts, 1920-1933.**

The number of applications by tenants for a certificate of the Local Authority as to the insanitary state of repair of their dwellings was 215, and 4 were subsequently withdrawn by tenants. In every instance a careful inspection of the premises was made, and a report submitted for the consideration of the Committee. Including applications still to be dealt with from the preceding year, certificates were granted in 179 cases, and 35 were refused.

Intimation was sent to the owner of each dwelling, giving details of the defects found, and, in many cases, repairs were immediately carried out.

*Applications by Landlords.*—Applications were received from owners of 44 houses in respect of which certificates had previously been granted to the tenants, requesting a report of the Local Authority to the effect that the houses were now in a reasonable state of repair. Including those continued from the previous year, reports were granted in 36 cases.

### **Ruinous and Dangerous Buildings.**

The following ruinous and dangerous buildings were dealt with and notices served on the owners requiring them, in terms of Section 191 of the Burgh Police (Scotland) Act, 1892, as applied to the County by Section 10 (2) of the Local Government (Scotland) Act, 1908, to take down or secure such buildings :—

50-54 *Kilncadzow Road, Carlisle.*—Empty dwellings—in negotiation.

5 *Busby Road, Carmunnock*.—Stone treads of outside stair at rear—repaired.

*Benvue, Bothwell*.—Self-contained dwelling-house—repaired.

7 and 9 *Victoria Place, Blantyre*.—Concrete mid-landing and brick-work and railings of outside stair—repaired.

58 *Hunthill Road, High Blantyre*.—Stone butt at end of access close—made secure.

3 *George Gray Street, Clydeview, Rutherglen*.—Brick-built boundary wall—repaired.

157 *Westburn Road, Cambuslang*.—Two-apartment dwelling-house—to be demolished.

114 *Stevenston Street, New Stevenston*.—Outside stairway—repaired.

244 *Hamilton Road, Cambuslang*.—Five dwelling-houses formerly dealt with by Closing Order—in course of demolition.

27 *Stevenston Street, New Stevenston*.—Wood-built shed, formerly a shop—taken down.

1 *Bellshill Road, Bothwell*.—Stone-built chimneyhead—repaired.

163-169 *West Maryston Road, West Maryston*.—Wood-built projection above shop and ground flat houses—taken down.

### Drainage.

There are still 63 Special Drainage Districts within the County, no new districts having been formed during the year.

*New Sewers*.—Information supplied by the County Drainage, &c. Engineer, as to sewers, etc., constructed during the year, and the number of connections made to public sewers, is shown in Appendix IV.

*Braehead*.—No improvement in the conditions referred to in last Annual Report has taken place. The owner of the lands receiving part of the discharge of the village removed several lengths of pipes

from the drain which passes through his field, thus causing liquid matter to flow over the surface of the field close to the highway, thereby increasing the likelihood of nuisance conditions arising or flooding of the roadway. No further increase in the number of sinks and inside water supplies to houses in the village was made, and this Department is not prepared, meantime, to sanction the introduction of such conveniences. The matter is still under consideration.

*Biggar.*—No further complaint was received regarding the pollution of the stream at Cormiston Towers referred to in last Annual Report. The owner of the piggery sold off the greater part of his herd of pigs, thus reducing the likelihood of recurring pollution of the stream. The matter, however, still receives attention.

*Crawford.*—Complaint was made during the year by the L.M. & S. Railway Company regarding the condition of a ditch running through the railway cutting at Crawford Station. It was found, after inspection and inquiry, that several properties discharged sewage into the L.M. & S. drain, which in its turn discharged into the ditch in question, permission to do so having presumably been obtained in the past. The property owners concerned were communicated with and steps taken in each case to ensure that the several effluents were rendered innocuous before reaching the ditch. The station drainage, however, still discharges to the ditch in a crude state and the matter is being dealt with.

*Brocketsbrae.*—The provision of a modern drainage system for this village is under consideration. Several properties have water-closets, sinks and baths, and most of them have also septic tanks, but the main drain into which these discharge is of aged construction and has been damaged by road operations. During the year, a meeting was held on the spot between the interested parties and an arrangement has been made between this Department and the Roads Department whereby an improvement in the condition of the main drain will be secured.

Complaint was also received that the ditch running from below Eastwood Farm to the Beggary Burn was in a foul state owing to the discharges from Brocketsbrae. The ditch was cleaned out by this Department and its ultimate treatment is still under consideration.

*Motherwell.*—Complaints were received from the Burgh of Motherwell Authority alleging pollution of the Grange Burn at Shields Road,

Motherwell, caused by sewage from Dalzell Special Scavenging District stables and Messrs. Anderson & Boyes' Electrical Works. Investigations showed that during the laying of a new sewer by the Burgh Authority the drains from the stables had been cut and diverted to the burn through a storm overflow. This was rectified by the Burgh Authority connecting the drains to the new sewer. It was also found that the drains from the electric works actually did discharge into the burn and negotiations are proceeding with the firm to have the nuisance conditions removed.

*Overtown.*—The districts of Castlehill and Gowkthrapple have no proper drainage systems. The private drain situated to the north-east of the main street is entirely unsatisfactory, the gradient being insufficient with the result that periodical chokages occur. The matter is now in the hands of the County Drainage Engineer, and proposals and plans have been submitted for the consideration of the Drainage Committee.

*Carluke and Law Drainage District.*—New sewer pipes and purification works are presently in course of construction.

*Easterhouse.*—The burn at Easterhouse was found to be in a foul condition due to sewage pollution, the chief source of which was a large piggery in the vicinity, and the matter was taken up with the owner who undertook to provide a more efficient type of septic tank and filter. In the meantime he had the burn cleaned out.

*Rutherglen.*—Sewers in this area continue to be satisfactory. No surcharging was experienced during the year. A complaint received regarding alleged pollution of Cityford Burn at Bankhead was investigated when it was found that drainage from Bankhead House was discharging to the banks of the burn. After negotiation, the owner had the drainage system continued across the burn and connected to the public sewer.

*Shotts.*—The new sewage works are still under construction, but it will probably be about another year before they are brought into use. Meantime the effluent from the sewers in Stane District is discharging into the Calder Water, but this arrangement will cease on completion of the purification works.

*Foul Ditches.*—Several ditches throughout the County into which sewage is discharged were cleaned out during the year at the instance of the Local Authority.



### Water Supply.

The water supply from the various reservoirs belonging to the Local Authority was more than sufficient to meet all demands. Complaints were received as to local deficiencies, but these were mostly found to be due to deficient service pipes and on being brought to the notice of the respective owners were remedied in every instance.

Complaints as to the scarcity of water for domestic purposes in Carmyle were taken up with the City of Glasgow Authorities who are responsible for the supply. They have agreed to lay a 15-inch main along London Road to Causewayside Street, Tollcross, and a 9-inch main in Carmyle Avenue. The work is now in progress.

From the Shettleston district of the County, where the water is also supplied by Glasgow Corporation, complaints were received as to the poor pressure in the third and fourth storey houses, several of these being without water at certain periods of the day. The deficiency in pressure appears to be due to the fact that the present water mains are unable to cope with the increase in demand due to the large housing development within recent years in the adjoining city area and to the larger water consumption for industrial purposes through the general improvement in trade. The matter has been taken up with the Glasgow Authorities.

A note prepared by the County Water Engineer showing the extensions to water pipes carried out during the year is shown in Appendix V.

**WATER SAMPLES.**—In view of complaints having been received regarding the quality of water supplies from private sources, samples were obtained from the following places and submitted for chemical analyses :—

*Laigh Netherton Farm, Carmunnock.*—Two samples of water were taken from different sources of the farm supply. No evidence of pollution was found.

*Todlaw Farm, Lesmahagow.*—Several samples of water were taken at this farm and found to be satisfactory for domestic use.

*Crofts Farm, Newbigging.*—A sample of water taken from the pump well at this farm was found on analysis to be free from nitrogenous organic pollution.

*Stoneypath, Dunsyre.*—A sample of water taken from the shallow well, forming the supply to the premises, proved to be sufficiently pure for domestic use.

*Cranley, Carstairs.*—Two samples of water, one from the tank in a field and the other from a tap in the dwelling-house, were taken and found, on analysis, to be of great purity.

*St. John's Kirk, Symington.*—A company of Girl Guides, in camp near here, obtained from the stream, a supply of water which was found, on analysis, to be suitable for domestic use.

*Woodend Farm, Carnwath.*—A gravitation water supply has now been introduced to these premises in place of the unsuitable supply referred to in last Annual Report.

*Killalees Farm, Kirkmuirhill.*—Two samples of water, subsequent to the unsatisfactory sample referred to in last Annual Report, were taken here and proved the supply from the pump well to be unsuitable for domestic and dairy purposes. Negotiations are still in progress for the installation of a satisfactory water supply for this farm.

*Blackburnmill Farm, near Chapelton.*—A sample of water taken from a ditch and proposed to be used for domestic and dairy purposes was adjudged unsuitable from the point of view of its physical character alone.

*Spring Valley, Chapelton.*—Two samples of water from the spring well here were found to be satisfactory.

*Mid Drumloch, Chapelton.*—Following upon an unsatisfactory sample of water taken here, an alternative supply was adopted and proved suitable in all respects.

*Todhole Farm, Lesmahagow.*—A sample of water taken from a spring in the moorland above this farm was found sufficiently pure for domestic purposes, although it contained a considerable amount of colour.

### Scavenging.

There are now 64 Special Scavenging Districts within the County, new districts having been formed on 14th April to include the villages of Ashgillhead, Eddlewood and Meikle Earnock, Glenboig, Glenmavis, Greengairs, Plains, and Thankerton.



The boundaries of Bishopbriggs and Auchinairn and Strathaven Special Scavenging Districts were also enlarged on 14th April.

A proposal was submitted to the County Council during the year for the combination of the following existing Special Scavenging Districts :—Aitkenhead, Tannochside and Bothwellpark ; Bellshill and Mossend ; Bothwell ; Holytown, New Stevenston and Carfin ; Newarthill ; and Uddingston, and thereafter to enlarge the boundaries of the Special District as combined to include these areas. After consideration, it was resolved to disapprove of the combination of the Special Districts referred to and the enlargement of the boundaries thereof.

A similar proposal was submitted in respect of the Special Scavenging Districts of Baillieston, Bargeddie, Carmyle and Mount Vernon, and North Shettleston, but as in the former case, the County Council, after consideration, decided against the combination and enlargement of the Districts in question.

Despite the clause inserted in all scavenging contracts relating to the collection of garden refuse from houses within Special Scavenging Districts, trouble is still experienced through the action of householders dumping such refuse in various open spaces and vacant ground adjoining dwellings. It is extremely difficult for complainers to understand that this type of "crime" cannot be dealt with by the Sanitary Department as in almost every instance it does not constitute a nuisance under the Public Health Act. Much is done, however, by the department in arranging for the scavengers to clean up accumulations, and getting owners of ground to erect warning notice boards, but the practice of dumping continues.

The following is a short summary of the work of scavenging carried out in each Special Scavenging District during the year :—

**AITKENHEAD, TANNOCHSIDE AND BOTHWELLPARK.**—The collection and disposal of refuse three times a week was satisfactorily carried out by a contractor, all refuse being disposed of at Fallside Quarry.

**ASHGILLHEAD.**—In this newly formed Special Scavenging District, the refuse was collected twice a week by a contractor and disposed of satisfactorily in a coup.

BAILLIESTON.—The daily collection and removal of refuse was carried out by a staff in the direct employment of the Ninth District Council. The scavenging of the Garrowhill Housing Estate and other properties in Barrachnie was carried out twice a week by a contractor. All the refuse was disposed of in Braehead Quarry.

During the year fire broke out at the refuse coup. Men were employed to trench off the burning portion, and the trench was filled up with earth and non-combustible refuse matter. This prevented the fire from affecting the rest of the coup, and the burning gradually abated.

A firm has acquired this quarry, and quarrying operations have commenced. This has curtailed the extent of ground available for refuse disposal, but there is still sufficient for present requirements, although the refuse tipping is done under somewhat more difficult conditions. Four privy middens were abolished during the year.

BARGEDDIE.—The scavenging of this Special District was carried out by a contractor, the refuse from ashbins being removed twice and from ashpits once weekly. The refuse was deposited in Braehead Quarry. One privy midden was abolished during the year.

BELLSHILL AND MOSSEND.—The collection and removal of refuse within this Special District was undertaken daily by a staff in the direct employment of the Sixth District Council, who have a superintendent to direct the work. The refuse was disposed of on waste ground at Boggsbrae.

BISHOPBRIGGS AND AUCHINAIRN.—The scavenging work was carried out satisfactorily during the year in the same manner as formerly, *i.e.*, by hired horse and man, and men employed by the District Council. There is considerable building activity in this area by way of private enterprise development and a very large extension of the boundaries of the scavenging district to include such houses was approved of during the year. As this extension includes a large number of houses and results in lengthy haulage work, it was recommended that motor haulage for refuse collection should be adopted. A trial of a 10 cubic yard freighter was successfully carried through during one week in February, and the final costing results submitted to the Committee for their consideration. The Committee, however, agreed to delay the question for further consideration.

The refuse coup at Huntershill Quarry has been in use now for over two years and useful work is being performed in the filling up of a very dangerous waterhole.

*Common Stairs, etc.*—Thirteen notices in terms of Section 117 of the Burgh Police (Scotland) Act, 1892, were served on owners of property requiring the limewashing or painting of common passages, and the terms of the notice were, in all cases, complied with.

BLACKWOOD.—The refuse in this Special District, which includes Blackwood, Kirkmuirhill and Auchenheath, was collected twice a week by contractors and deposited in coups and on farm lands. The work was carried out in a satisfactory manner.

BLANTYRE.—The collection and removal of refuse was carried out by a staff in the direct employment of the Fifth District Council, and supervised by their superintendent. The refuse is removed daily by two motor freighters and conveyed to a coup in the public park, where it is used for levelling purposes.

*Common Stairs, etc.*—Twelve notices were served on owners of properties requiring the limewashing or painting of common passages and staircases, and in all cases the terms of the notice were complied with.

BOTHWELL.—The daily collection and removal of refuse by direct labour was satisfactorily carried out. The refuse was disposed of in Fallside Quarry.

BRAEHEAD.—The twice weekly collection and removal of refuse was satisfactorily carried out by a contractor and the refuse deposited in a disused limestone quarry adjoining the village.

BRAIDWOOD.—The scavenging of this Special District was satisfactorily carried out by a staff in the direct employment of the Third District Council. The refuse from ashbins is collected twice weekly and ashpit refuse once a week by motor refuse vehicle from Carluke Special District and deposited in Moor Quarry Coup.

BUSBY.—The collection and removal of refuse was undertaken by a contractor twice a week, all refuse being deposited in a coup. A new dustcart, of the four-wheel rubber tyre type, was provided during the year.

CALDERBANK.—The refuse from this Special District was removed to farm lands twice weekly by a contractor.

CAMBUSLANG.—The daily collection of refuse was satisfactorily carried out by a contractor, the refuse being removed to the land reclamation scheme at Morriston Loch.

The flood protection bank at Morriston Loch has been completed and now affords full protection to the field from the River Clyde. Work is now proceeding on the construction of a playing pitch, which will take some time to complete, it being necessary to raise the level of the ground to the height demanded for the complete scheme of reclamation.

The work of disposing of the refuse was very satisfactorily carried out, and, as was the case last year, no complaints were received.

Back-courts are troublesome and, owing to the rough and badly graded surfaces, are difficult to keep clean. Paving and the restoration of feu boundary walls would be a really worth while improvement, not only from a scavenging point of view, but in the prevention of damage to properties, by children and youths who, at the present time, have the freedom of whole squares of property. Further powers in this respect might be obtained by the adoption of Section 21 of the Burgh Police (Scotland) Act, 1903.

*Common Stairs, etc.*—Forty-five notices were served on owners of property requiring the whitewashing or painting of common passages and staircases, and the necessary work was duly carried out in all instances. In five cases, notices, in terms of Section 115 of the Burgh Police Act, 1892, were also served on occupiers who had failed to keep clean the common passage and stairs giving access to their premises. Sweeping and washing have since been regularly carried out.

CARLUKE.—The collection and removal of refuse was carried out satisfactorily by a staff in the direct employment of the Third District Council. The refuse from ashbins was collected three times a week, and from ashpits once a week. All the refuse is deposited at Moor Quarry Coup. Unfortunately, this coup is not in the sole possession of the Third District Council, and a very unsatisfactory state of affairs exists at times. The road of access is an open one,

and numerous contractors, business firms and hawkers deposit all sorts of refuse, viz. :—broken jam jars, tomato haulm, etc., poultry feathers, papers, tin cans and clayey road material. A report was submitted to the District Council stating that the Coup was most unsuitable and was rapidly filling up. Negotiations are in progress for another coup.

CARMUNNOCK.—A change in the method of collection of household refuse in this district was made as from May last. The motor freighter belonging to the Eighth District Council, and used by the Rutherglen (Landward) Contractor, was utilised for this work, and a considerable improvement, both in the method and the regularity of collection, has resulted. The refuse is deposited at Morriston Loch, Cambuslang.

Six obligations were signed by persons outwith the boundary of the Special Scavenging District requesting scavenging services. These were agreed to. One other request was refused.

CARMYLE AND MOUNT VERNON.—The refuse from this Special Scavenging District was collected three times a week by a contractor and deposited in a coup.

CARNWATH.—The thrice-weekly collection and removal of refuse was carried out in a satisfactory manner by a contractor and the refuse deposited on moorland at Planton Toll.

CARSTAIRS.—The thrice weekly collection and removal of refuse from this Special Scavenging District was undertaken by a contractor, and the refuse deposited in a disused sandpit about half a mile from the village.

CARSTAIRS JUNCTION.—The daily collection and removal of refuse was carried out by a contractor, all refuse being deposited in an old sand quarry about a mile from the village.

The proposal to amalgamate the Special Districts of Carstairs and Carstairs Junction was further considered, but had not been proceeded with at the close of the year.

CHAPELHALL.—The collection and removal of refuse from this Special District still continues to be carried out in a satisfactory



manner. The refuse from ashbins was removed twice weekly and from ashpits at least once a month, and disposed of by a contractor on farm lands.

CHRYSTON AND MUIRHEAD.—The work of scavenging in this Special District was carried out satisfactorily by a contractor, all refuse being collected and removed twice weekly. Some alteration will be required in the coming year as an extensive housing scheme is presently in course of construction between Muirhead and Gartcosh. A report has been prepared regarding the linking up of these districts and other small outlying areas, and the introduction of motor haulage for collection purposes. This, if adopted, would vastly improve the existing services.

One obligation was signed by a person outwith the Special District requesting scavenging services. This was agreed to.

*Common Stairs, etc.*—Three notices were served on owners of property regarding the whitewashing or painting of common passages, and, in all cases, the terms of the notice were complied with.

CLELAND AND OMOA.—The refuse in this Special District was collected and removed three times weekly to farm lands by a contractor. During the year three ashpits were abolished.

COALBURN.—The twice-weekly collection and removal of refuse from this Special District was satisfactorily carried out by a contractor, and the refuse deposited at Bellfield Coup.

CRAWFORD.—The refuse was collected and removed weekly by a contractor, who disposed of it in a coup on the lands of Midlock Farm. The work was done satisfactorily.

CROSSFORD AND HAZELBANK.—The refuse was collected three times a week by a staff in the direct employment of the Second District Council, and deposited in a coup at Byrewood, Kirkfieldbank.

CROSSLAW.—The twice-weekly collection and removal of refuse was undertaken by a contractor, who carried out the work in a satisfactory manner. The refuse was deposited in a coup belonging to the Lanark Burgh Authority. Three applications for scavenging facilities were received from persons outwith the Special District, and were granted.

DALZELL AND NETHERTON.—The daily collection and removal of refuse was carried out by a contractor, the refuse being disposed of in coups. The contract is conjoint with Hamilton Road Special Scavenging District.

DOUGLAS.—The daily collection and disposal of refuse was carried out by a scavenger in the direct employment of the Second District Council, all refuse being deposited in a coup at Pathhead.

EAST KILBRIDE.—The work of collection and removal of refuse was carried out thrice weekly by a contractor, who deposited the refuse in a coup. Owing to severe snow storms at the beginning of the year the collection of refuse in this district was interfered with on two occasions for a period of two days. The contractor overtook the work after the coup roads were cleared, without any additional assistance. Repairs to the coup road were carried out during the year, and a new dustcart, of the four wheel rubber tyre type, was provided.

EDDLEWOOD AND MEIKLE EARNOCK.—During the year this Special Scavenging District was formed to include Cadzow, Eddlewood and Meikle Earnock. The twice weekly collection and removal of refuse was satisfactorily carried out by a contractor, and the refuse deposited in a coup.

FORTH.—The daily collection and removal of refuse was carried out satisfactorily by a contractor, the refuse being deposited in coups. One privy-midden was abolished during the year.

GARTLEA.—The weekly collection and removal of refuse to a coup was carried out until 15th May in a satisfactory manner by a contractor. Since that date, the whole district has been included within the extended boundary of the Burgh of Airdrie.

GARTCOSH.—The refuse in this Special District was collected and removed twice weekly by a contractor. The refuse was utilised in a market garden and gave rise to no complaint.

GLASSFORD.—The refuse from the dustbins in this Special District was collected twice weekly, and the contents of ashpits removed at least once a month, or whenever a cartload had accumulated. The work was carried out satisfactorily by a contractor, who removed the refuse to farm lands.



GLENBOIG.—The work of scavenging this new Special District commenced on 15th September, the refuse from ashbins being removed twice weekly by a contractor. The removal of the contents of ashpits and privy-middens was not carried out as often as required in the conditions of contract, and the contractor was warned to have this work more regularly attended to. As this did not produce the desired improvement, the facts were reported to the Ninth District Council. Seven ashpits were abolished during the year.

GLENGOWAN AND CALDERCRUIX.—The refuse from ashbins was collected and removed by a contractor twice weekly, and the contents of ashpits removed at least once a month, all refuse being disposed of on farm lands.

GLENMAVIS.—This new Special Scavenging District was formed on 14th April. The refuse from ashbins was removed by a contractor twice per week, and from ashpits at least once per month, all refuse being disposed of on farm lands.

GREENGAIRS.—The refuse from this new Special District, which was formed on 14th April, was collected and removed by a contractor twice weekly from ashbins and at least once per month from ashpits, all refuse being disposed of on farm lands.

HAMILTON ROAD.—The daily collection and removal of refuse was carried out satisfactorily by a contractor, the refuse being disposed of in a coup. This contract is conjoint with Dalzell and Netherton Special Scavenging District.

HARTHILL.—The refuse from this Special District was collected and removed by a contractor twice weekly from ashbins and at least once per month from ashpits, all refuse being disposed of on farm lands. One ashpit was abolished during the year.

HAYWOOD.—The contents of the privy-middens and ashpits were removed fortnightly by a contractor, and the refuse deposited in a coup in the moorland. One privy-midden was abolished during the year.

HOLYTOWN, NEW STEVENSTON AND CARFIN.—The daily collection and removal of refuse was carried out in an efficient manner by a

staff in the direct employment of the Sixth District Council. During the year the filling in of the pond at the old Carfin brickworks was completed. Disposal of refuse still continues in coups at the Brickwork Quarry, Carfin, and Carfin Hall, New Stevenston. The ashpits at Legbrannock are emptied weekly and the refuse removed to farm lands by a contractor.

KIRKFIELD BANK.—The refuse was collected and removed three times a week by a staff in the direct employment of the Second District Council, and deposited in a coup at Byrewood, Kirkfieldbank.

*Common Stairs, etc.*—One notice was served on an owner of property requiring the limewashing or painting of a common passage and staircase, and the necessary work was duly carried out.

LARKHALL.—The daily collection and removal of refuse was carried out in a satisfactory manner by a staff in the direct employment of the Fourth District Council, the refuse being deposited in a coup and on farm lands.

*Common Stairs, etc.*—Three notices were served on owners of property requiring the limewashing or painting of common passages and staircases, and, in all cases, the necessary work was carried out.

LAW.—The collection and disposal of refuse was carried out by contractors. During the first part of the year, the contractor was most unsatisfactory in the execution of his duties, and numerous complaints were made, both as regards the collection and in the disposal of the refuse. The contractor was warned on several occasions, and, on the expiration of his contract, 15th May, a new contractor was employed. From then onwards, no complaints were received, and the work was carried out in a satisfactory manner. The refuse is removed from ashbins three times a week and from ashpits at least once a month. A small portion of the refuse from the lower end of the village was spread over farm lands, but the greater portion was deposited in the Quarry Road Coup, Lawhill.

Much the same conditions existed at this coup as those mentioned in the paragraph relating to Carluke Scavenging. The matter was reported to the Third District Council, and negotiations were entered into for the complete use and sole right of the Quarry. Towards

the end of the year the negotiations were completed and the Quarry was fenced off.

LEADHILLS.—The weekly collection and removal of refuse was satisfactorily carried out by a contractor, the refuse being deposited in two coups.

LESMAHAGOW.—The daily collection and removal of refuse was carried out in a satisfactory manner by a staff in the direct employment of the Second District Council, and the refuse disposed of in Craighead Park, where ground is being made up.

NEWARTHILL.—The collection and removal of refuse to farm lands was satisfactorily carried out by a contractor, the contents of ashbins being removed twice weekly and ashpits emptied at least once a month.

NEWMAINS.—The daily collection and removal of refuse was carried out by a contractor, the refuse being deposited in a coup and on farm lands.

NORTH SHETTLESTON.—The collection and removal of refuse was carried out satisfactorily by a contractor and three men employed by the Ninth District Council. A daily service was maintained for tenement properties and a twice-weekly collection for the Springboig and North Mount Vernon Housing Schemes. The refuse was deposited in a coup at Craigend.

With a view to improving the method of collection in this district, it was recommended that a motor freighter be provided. This was approved, and it is expected to have the freighter in operation early in the coming year.

*Common Stairs, etc.*—Seventeen notices were served on owners of property requiring the limewashing or painting of common passages and staircases, and in each case the necessary work was duly carried out. One notice was served on an occupier who had failed to keep clean the common passage giving access to his premises. As this failed to produce any effect, the occupier was warned that court proceedings would be immediately instituted, and since then the sweeping and washing of the common passage have been regularly carried out.

OVERTOWN AND WATERLOO.—The work was carried out by a contractor, all refuse from ashbins and dry-closets being removed twice weekly, and the contents of ashpits removed at least once a month. The refuse was deposited in coups.

PLAINS.—This new Special Scavenging District was formed on 14th April. The refuse from ashbins was removed by a contractor twice weekly, and from ashpits at least once a month. The work was carried out in a satisfactory manner.

PONFEIGH.—The refuse was collected and removed four times a week by a contractor, and the refuse disposed of in a disused quarry fully a mile from the village. The work was carried out in a satisfactory manner.

RUTHERGLEN.—The motor freighter supplied by the Council and used by the Contractor has given a much improved scavenging service in this District. Owing to the rapid increase in building within the area, the Contractor has found it necessary to use a motor vehicle of his own to assist the freighter in covering the area and giving the service required. Several complaints were made during the year, and, in addition to verbal and written warnings, the Contractor was summoned before the Committee. Since then there has been a decided diminution of complaints. The refuse is disposed of at Morriston Loch, Cambuslang.

*Common Stairs, etc.*—Thirty-six notices were served on owners of property requiring the limewashing or painting of common passages and staircases, and, in all cases, the necessary work was duly carried out.

SALSBURGH.—The twice-weekly collection and removal of refuse was satisfactorily carried out by a contractor, the refuse being disposed of on farm lands.

SHOTTS AND DYKEHEAD.—The daily collection and removal of refuse was carried out in an efficient manner by a staff in the direct employment of the Seventh District Council. The refuse was deposited in two coups.

The refuse collection continues to increase, and cleansing work is particularly heavy during the winter period. The Calderside Coup

was discontinued during the year, owing to its close proximity to the dwellings of "Calderside," Station Road. The negotiations with the agents at Calderhead Estate resulted in a new coup being obtained on the same lands, but situated fully three hundred yards west of the nearest dwelling-house. It is estimated that this new coup will serve the district for about seven years.

**SOUTH LENZIE.**—The refuse collection and removal was carried out twice weekly by a contractor in a satisfactory manner, all refuse being deposited in an old quarry at Boghead.

*Common Stairs, etc.*—Four notices were served on owners of property requiring the limewashing or painting of common passages and staircases, and in all cases the necessary work was duly carried out.

**STEPS.**—The twice weekly collection and removal of refuse was carried out in a satisfactory manner by a contractor, the refuse being deposited on low-lying marshy ground on the west side of Magazine Road, and well covered over with a top dressing of engine ashes.

*Common Stairs, etc.*—Five notices were served on owners of property requiring the limewashing or painting of common passages and staircases, and in all cases the necessary work was duly carried out.

**STONEHOUSE.**—The twice weekly collection and removal of refuse was satisfactorily carried out by a contractor and the refuse deposited in a coup rented by the Local Authority. During the year, the fencing of the coup was renewed, a stob and wire fence being erected where the rail fencing had been demolished.

**STRATHAVEN.**—The daily collection and removal of refuse was undertaken by a contractor, who deposited the refuse in a coup. The work was carried out satisfactorily. On 14th April the boundary of this Special District was extended, and now includes houses which previously were receiving the service on payment of rates under a signed obligation.

**SYMINGTON.**—The scavenging service was satisfactorily carried out by a contractor. The refuse was collected and removed thrice weekly and deposited in a coup in Hospital Field.



THANKERTON.—This new Special Scavenging District was formed on 14th April. The twice weekly collection and removal of refuse was satisfactorily carried out by a contractor, who deposited the refuse in a disused whinstone quarry on Thankerton Moor about half a mile from the village.

UDDINGSTON.—The daily collection and removal of refuse was satisfactorily carried out by a contractor, the refuse being deposited in a coup.

HOUSING SCHEMES OUTWITH SPECIAL SCAVENGING DISTRICTS.—The collection and removal of refuse twice weekly from the dwellings at the following housing schemes still outwith Special Scavenging Districts was carried out by contractors under the supervision of the local sanitary officers, viz. :—Broomhouse, Carnbroe, Ferniegair, Kingshill and Ravenstruther, and once weekly at Moodiesburn and Mollinsburn.

PROVISION OF DUSTBINS.—During the year 129 notices in terms of Section 23 of the Burgh Police (Scotland) Act, 1903, were served on owners of tenement houses within Special Scavenging Districts, requiring them to provide proper covered galvanized-iron ashbins of specified cubic capacity. In most cases, suitable ashbins were immediately provided, and the remainder were reported to the Committee with a view to proceedings, in terms of Section 24 of the Act, being instituted. It was not found necessary, however, to take legal action, as the necessary ashbins were duly supplied.

### Private Streets.

*Bellshill.*—With regard to the unsatisfactory condition of the roads in the vicinity of the houses at New Orbiston Rows, Parkhead Rows and Douglas Park Rows, Bellshill, referred to in last Annual Report, certain specified improvements, including kerbing and channelling work, were carried out at Parkhead Rows. At New Orbiston Rows tarmacadam footpaths were laid and the main roadway was oottomed and surfaced. With regard to Douglas Park Rows, repairs of a temporary nature were carried out in view of these houses being dealt with under the Housing Act.



*Bishopbriggs*.—A complaint was made regarding the unsatisfactory condition of Viewfield Road, and the matter was taken up with the agents for the superiors in view of the fact that it was considered that extra traffic from the Taylor Coltmuir Stone Co., Ltd., was mainly responsible for the state of disrepair complained of. Negotiations were proceeding at the end of the year.

*Blantyre*.—Nothing has been done to put Rosebank Avenue, referred to in last Annual Report, in a satisfactory condition.

*Bothwell*.—The private streets at Palace Colliery Rows referred to in last Annual Report were made the subject of a complaint and it has been remitted to the County Drainage Engineer to submit plans and specifications of a scheme to improve their conditions.

*Cambuslang*.—The road of access from Glasgow Road to Buchanan Square referred to in last Annual Report has been reconstructed and a new tarmacadam footpath formed round the square.

Pretoria Street has been entirely reconstructed in order to conform to the provisions of Section 39 of the Public Health (Scotland) Act, 1897.

*Coalburn*.—It was mentioned in last Annual Report that negotiations were in progress with regard to proposed improvement in the conditions at Garden Street, Schoolhouse Lane, School Lane, road to Coalburn House and road from Tinto View Terrace to Railway Terrace. At the end of the year all these streets with the exception of the last-mentioned have been repaired in a satisfactory manner. The road from Tinto View to Railway Terrace has been top-dressed with furnace ashes, apparently on the "hit or miss" principle, the cure being as bad, if not worse, than the disease. The matter is still on hand.

*Douglas*.—Meetings were held with interested parties regarding the condition of a narrow road serving some private properties at Weaver's Yard. The road in question is little more than a lane, and, after consideration, it was decided that the case was not one which called for action by the Local Authority meantime.

*Gartcosh*.—As the result of complaints made regarding the unsatisfactory condition of Woodneuk Road, the question of the

improvement of the roadway was taken up with the owners. In view of their attitude, however, the matter was referred to the Local Authority and a Sub-Committee made an inspection of the road. The matter was still being dealt with at the close of the year.

*Larkhall.*—As a result of complaints received regarding the miry condition of the private street at St. David's Place and Bowmanflat, the matter was taken up with the various feuars with a view to the street being put in proper order. The matter is still in hand.

The condition of the roadway at Tinto View, Ashgill, was also the subject of a complaint, and it is also receiving the attention of the Department.

*Morningside.*—The unsatisfactory condition of School Road was made the subject of a complaint and meetings were held with the owners of property in the roadway. No agreement was reached, however, owing to the financial circumstances of the owners and the matter is still under consideration.

*Shotts.*—Greenwood Street, referred to in last Annual Report, has now been made up to highway standard and taken over by the County Council.

*Stepps.*—At a meeting of the feuars in School Road, it was agreed that the County Roads Department be asked to carry out the repair work to bring the roadway up to the highway standard and thereafter to be taken over by the County Council. The work had not been completed at the end of the year.

### Nuisances.

During the year 72,394 inspections were made for the detection of nuisances and the number of nuisances recorded was 1,428, comprising chiefly of choked drains, sinks and water-closets. Several chokages were caused through carelessness on the part of the occupiers of dwelling-houses and warnings were given to those concerned.

Intimations under Section 19 of the Public Health Act were issued to authors of nuisances in 887 cases, and in many instances the cause of complaint was immediately removed. Where the

Intimations had no attention, Statutory Notices under Section 20 of the Act were served, and these numbered 77.

*Prosecution.*—A complaint regarding the keeping of dogs and pigeons by one of the Local Authority's tenants at 1 Queen's Crescent, New Stevenston, was proved to be well founded. Several dogs were kept in roughly-built wooden kennels in the garden, and there was also one in the dwelling. Numerous pigeons were kept in the outside cellar recess at the rear, the door of which was kept open during the day. Repeated warnings to the tenant had little effect, however, but, on the case being entered for prosecution, all the animals were removed with the exception of one dog. In the circumstances the Sheriff dismissed the petition.

*Unfenced Mine Shafts.*—Intimations were received in the course of the year from H.M. Inspector of Mines of the abandonment of twenty-seven mines, and calling the attention of the Local Authority to the provision of Section 26 of the Coal Mines Act, 1911, requiring every shaft and outlet to be kept surrounded by a structure of a permanent character, sufficient to prevent accidents, and making failure to comply with that requirement a nuisance within the meaning of Section 16 of the Public Health Act. The mine shafts were situated as follows:—Tillonburn, Biggarford; Westown, Coalburn; Shettleston 3-4, Shettleston; Auchinlea No. 1, Cleland; South Langridge No. 2, Newhouse; Greenside No. 2, Holytown; Hillwood No. 2, Drumbow; Hillhead, Calderbank; Whittagreen No. 2, Newarthill; Bogtongue, Newarthill; Lavericknowe, Raebog; Townhill, Chapelknowe; Cornsilloch 2-3, Dalserf; Struther Nos. 1-5, Larkhall; Wester Dunsyston, Chapelhall; Bishop, Gartcosh; Mossie Nos. 3-4, Airdrie; Carey Glen & Carey Glen No. 2, Caldercruix; Leaend No. 3, Chapelhall; South Blair Mine, Harthill; and Glenrigg No. 7, Riggend.

The matter was taken up with the various owners, and in most cases precautions have been taken. In the remaining cases negotiations are proceeding with a view to the necessary work of protection being carried out.

*Burning Bings.*—Several burning bings of colliery refuse throughout the County were reported during the year as emitting smoke and offensive fumes, and the matter was taken up with the respective colliery owners with varying success.

The question of burning bings was referred to the Ministry of Mines with the suggestion that the Department should investigate the whole question of dumping of pit refuse and advise what steps might be taken with a view to the prevention of the accumulations of pit debris in future. Later a print of the Public Health (Coal Refuse) Bill, which had been introduced to Parliament as a private member's Bill, was submitted to the Committee. The Bill provided that coal mine refuse liable to spontaneous combustion would be deemed to be a nuisance to be dealt with summarily under the Public Health Act, 1936. The Committee agreed to suggest to the Ministry of Mines that legislation might be introduced, compelling the owners of mines to take steps with regard to abating existing burning bings, and also with a view to preventing the accumulation of pit debris on the surface in future.

*Smoke Emission.*—A number of complaints dealing with excessive emission of smoke from the chimneys of factories, greenhouses, etc., were investigated during the year. On intimation and advice being given to the responsible persons, conditions were improved.

*Coal-Gas Fatality.*—Towards the end of the year the Department were asked to investigate a case of gas poisoning at Auchinloch, Lenzie. The person affected was removed to an infirmary and died there. It was thought that, owing to mineral subsidence in the area, gas from the underground pipe might have penetrated the dwelling in which the affected person resided, and, after a thorough investigation, it was found that a joint of the gas pipe underneath the footpath had been broken and gas, not getting through the surface of the path owing to its tarmacadam covering, had travelled along the track of the gas pipe and drain, and gained access to the house through an opening in the wall. The internal plumber work and defective gas pipe have since been made good.

*Nuisance by Dogs, etc.*—Numerous complaints have been received as to nuisance conditions created by dogs on public footpaths. This type of nuisance has been aggravated in recent years in districts where large numbers of greyhounds are kept, and the persons in charge of these animals on the lead appear to pay no attention to the demands of common decency. To bring such people to heel it is the intention of the Local Authority to apply for Statutory powers to deal with offences of this nature.

A complaint was received regarding the keeping of dogs and cats in a three-apartment house in Springboig, Shettleston. On investigation it was found that three dogs and twelve cats were kept in the house by a lady who lived alone and made it a practice to collect and look after stray cats and dogs. The animals appeared to be well fed and cared for. There was no doubt that nuisance conditions were created and it was found necessary to intervene. Subsequently she gave up her house and removed from the district with her livestock.

*Verminous Houses.*—Many inspections in connection with bug infestations were made and there appears to be a general improvement in this type of nuisance, due no doubt to the intensive propaganda of the department, combined with the desire of most occupiers to be rid of these pests. It is also the practice of the Local Authority to insist that bug-ridden bedding be destroyed by persons who are allocated new Council houses before they take up occupancy, and it was principally for this reason that the Local Authority adopted the Scheme for the supply of beds and bedding, referred to elsewhere in this Report.,

*A Gas Attack.*—During the month of August complaint was received from tenants of a property in Cambuslang that the wash-house had become untenable owing to its being invaded by a swarm of wasps, and they requested assistance in dealing with the insects. The only material which the Local Inspector had at hand was formaline and some small tubes of sulphure ( $\text{SO}_2$ ) gas. One of the latter was opened in the wash-house and the gas compelled the insects to retreat therefrom, but they swarmed again on the outer wall. Another tin tied to the end of a pole was opened and the gas directed point blank at the "enemy." This method of attack was successful as the invaders were overcome, and peace was restored.

*Rats and Mice (Destruction) Act, 1919.*—Many investigations were conducted during the year in connection with the infestation by rats of various premises throughout the County. In all instances occupiers of land and premises were informed of their obligations under the Act, and, where required, instructions and advice were given as to the necessary action to be taken. On revisitation, it was generally found that the vermin had been exterminated, or considerable progress had been made in their destruction.



The various refuse dumps in the County were regularly inspected or the presence of rats, and where conditions warranted action was taken. Cyanogas and various rat poisons were used with satisfactory results.

A complaint was received from the owner-occupier of a mansion house situated near the River Clyde at Bothwell as to the enormous influx of rats to his grounds, probably due to blasting operations which were in progress at the site of a new sewage purification works nearby. Active measures were taken and no further trouble has been experienced.

### **Cinemas.**

The cinemas within the County were all regularly inspected during the year and a good standard of cleanliness was found to be maintained in the halls and conveniences. Defects of a minor character were found in several premises, but these were immediately attended to on being brought to the notice of the managers concerned. Fire appliances were found in order at all places.

### **Public Conveyances.**

During the year many inspections of public conveyances were made and the general cleanliness of the vehicles was found to be good. It is regrettable, however, that the disgusting habit of spitting on the floors and sides of vehicles shows no sign of abatement despite warning notices displayed in vehicles.

### **Workshops.**

The number of workshops on the register at the close of the year was 442, being a decrease of 37 on the previous year.

During the year two notices were received from H.M. Inspector of Factories of persons beginning to occupy workshops. The premises were duly inspected, measured and the occupiers supplied with cards showing the capacity of each room and the number of employees permissible.

The inspections number 437, including 64 of factory bakehouses. The following cases found in the course of our routine inspections were dealt with :—two dirty workshops and a leaky water-closet.

A complaint was received from H.M. Inspector of Factories regarding insufficient water-closet accommodation for the workers employed in the Clyde Crane and Engineering Company's Works, Mossend. On investigation, however, it was found that a mis-statement



had been made to the Factories Inspector regarding the number of employees, and the lack of conveniences was less serious than at first supposed. As there was a likelihood of the transfer of employees to a factory elsewhere, the matter was held in abeyance pending further developments.

Another complaint was received from H.M. Inspector of Factories as to the condition of a rag-sorting workshop at Bargeddie. The premises were inspected, and it was found that the business was being carried on in buildings adjacent to a piggery which also belonged to the owners of the rag workshop, and the whole premises were in unsatisfactory condition. The matter was taken up with the owners with the result that the piggery was abolished, the workshop premises cleaned out and whitewashed, and a proper latrine provided. There was no gravitation water supply available to allow the provision of a water-closet for the employees.

The existing accommodation being unsatisfactory, plans were submitted showing new water-closet and urinal accommodation for the male employees and new water-closets and wash-hand basins for the females at the B.N.E. Works, Newarthill. As more than one factory is involved the matter has been delayed for adjustment.

At Westburn Steel Works, referred to in last Annual Report, eight water-closets and a four-stall urinal were installed in accordance with a plan submitted by the Company after complaint by H.M. Inspector of Factories as to insufficient accommodation for the number of workers employed.

The following table gives the handicrafts carried on in the various workshops :—

Dressmaker, ... ..	13	Moss Litter Worker,	1
Tailor, ... ..	57	Watchmaker, ... ..	4
Milliner, ... ..	2	Plumber, ... ..	31
Baker, ... ..	128	Motor Repairer, ... ..	17
Shoemaker, ... ..	66	Hosier, ... ..	6
Saddler, ... ..	8	Coachbuilder, ... ..	4
Blacksmith, ... ..	42	Painter, ... ..	3
Joiner, ... ..	48	Confectioner, ... ..	2
Cabinetmaker, ... ..	6	Tinsmith, ... ..	1
Oil Refiner, ... ..	1	Ham Curer, ... ..	1
Cement Slab Manufac- turer, ... ..	1		

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Total, ... ..	442
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*Outworkers.*—Four lists, containing five out-workers, under Section 107 of the Factory and Workshop Act were received from the City of Glasgow Authority, and inspections were made of all the premises. These were found in a satisfactory condition.

*Fire Escapes.*—As referred to in last Annual Report, the Clyde Paper Company, Rutherglen, improved the fire escape facilities at their works on the lines previously suggested by this Department. Two new outside stairways were provided at different parts of the factory and inside doorways, and stairways improved.

*Factories Act, 1937.*—The Factories Act, 1937, received the Royal Assent on 30th July, and, except as otherwise provided, comes into operation on 1st July, 1938. To a great extent it is largely a consolidation Act and repeals entirely five earlier enactments, including the Factory and Workshops Acts of 1901 and 1907, and partially repeals nine other enactments.

The administrative and executive duties to be carried out by the County Council are, however, limited although their scope is somewhat wider than formerly. Such provisions of Part I as relate to sanitary conveniences in all factories and the provisions relating to cleanliness, overcrowding, temperature, ventilation and drainage of floors in factories where mechanical power is used are to be enforced by the County Council. The enactments relating to basement bake-houses and industrial outworkers have been brought up to date.

### **Public Schools.**

The various public schools within the County were inspected during the year and several matters requiring attention were brought to the notice of those responsible. The general cleanliness of the classrooms and lavatories was found to be satisfactory. At the request of headmasters, several schools were disinfected.

The work on the erection of a new R.C. school at Old Edinburgh Road, Tannochside, was commenced, and at Bothwell additional accommodation for pupils at Elmbank R.C. School was also commenced.

At Cambuslang, St. Bride's R.C. School is presently being reconstructed, and at Newton Public School several improvements are in hand, including the complete renewal of the lavatory accommodation.

During the summer vacation parties of children from Glasgow, whose parents were in necessitous circumstances and unable to give their children the benefit of a holiday, were accommodated in several schools in rural districts of the County, under the auspices of the Necessitous Children's Holiday Camp Fund, Education Offices, Glasgow. The conditions during their stay were found satisfactory, and it was pleasing to note the marked improvement in the children's physical appearance as a result of their stay amidst the pure air of our countryside, and of regular hours of rest and recreation, together with good food supplied at stated hours.

### **Tents and Vans.**

During the year, 1,012 inspections of tents and vans were made, and, with several exceptions, all the premises were found in a satisfactory condition.

As the result of complaints regarding vans in the centre of Caldercruix Village without proper sanitary conveniences, referred to in last Annual Report, chemical closets have now been provided.

At Gartgill the occupier of the caravan referred to in last Annual Report was still in the premises at the end of the year as he had been unable to obtain alternative accommodation.

The occupier of a caravan found to be located on vacant ground at Lightburn Road, Cambuslang, was ordered to remove. He took a stance in a local contractor's yard, stating that owing to the illness of one of the occupants he could not go on. Several months elapsed, and, despite repeated warnings, he refused to move. The owner of the ground placed the matter in the hands of his law agents, and the caravan was removed before Court proceedings were instituted.

Complaints were received from the residents in Kilncadzow Village regarding repeated occupancy of the common ground by travelling tinkers and hawkers. Numerous visits were made and the occupants of the tents and vans were warned, after which they removed from the vicinity.

A bus body used as a residence and situated at the Oil Work Braes, Stonehouse, referred to in last Annual Report, has now been vacated and rendered unfit for further use.

The summer camp at Lickprivick Farm, East Kilbride, was again run on very satisfactory lines, and no cause for complaint was found. At Peel Park, a Boy Scout Camp was held this year, and the arrangements were satisfactory.

### **Interments.**

The interments carried out at the expense of the Local Authority, under Section 69 (1) of the Public Health Act, numbered 43—3 adults and 40 infants—the deaths being due to various causes. The total shows an increase of 1 over the previous year. The number of bodies claimed was 39, but no “sufficient person” undertook the burial. The total cost to the Local Authority amounted to £65 12s.

A request was made by the Police Authority to reinter a number of human skulls and bones found on excavation at a new sand quarry at Cadder, Bishopbriggs. The remains were examined by experts and found to be very old, probably well over 100 years. No action was taken by this Department.

In every case where application is made to the Local Authority for the interment of a dead body by relatives or others, who allege that they are unable to bear the expense of the burial on account of poverty, it has been the practice of the Department to make careful inquiry into all the circumstances, particularly to ascertain whether the deceased person was insured in any benefit society, and, as a result, sums were afterwards recovered, amounting to £2 18s.

### **Common Lodging-Houses.**

There are only two common lodging-houses within the County area, and these are situated at Bellshill and Shotts. The keepers applied for, and were granted, renewal of registration. Both premises were regularly inspected and found in a satisfactory condition. The local improvement in trade has created an increase in the number of lodgers in residence, but the premises are far from being used to capacity.

## Dairies.

During the year, 2,009 visits of inspection were made by the Sanitary Staff to dairy premises, and, in several instances, structural defects were reported and dealt with under the Local Authority's Bye-laws.

As a result of complaints regarding dirty milk supplies, special visits were made at milking time to certain dairy farms, and, where methods of milking were found to be unsatisfactory, instructions were given, with good results. The most common complaints were non-rejection of first streams of milk, and milkers without overalls.

A number of cowkeepers were dealt with for failing to keep clean their dairy animals and byres, and on subsequent visits it was found that the warning had had the desired effect.

In one instance, at an otherwise clean dairy farm, it was found that the use of the milkhous had been dispensed with, the utensils being stored in the dairy scullery and the milkhous used for the rearing of chickens. The matter was taken up with the farmer and the practice ceased.

At Yieldshields Farm, Carluke, the dairy premises were reported as being unsatisfactory. After negotiation it was decided not to carry out the requirements of the Bye-laws. Accordingly, registration was withdrawn from the tenant and the whole of the dairy stock was disposed of.

*New Byres.*—Progress continues to be made in the provision of new byres and improvements to dairy premises generally. The following plans were submitted to and approved by the Local Authority during the year, viz. :—

Walston Braehead Farm, Walston,	New Byre.
Bent Farm, Kirkmuirhill, ...	Do.
Tweedieside Farm, Strathaven,	Do.
East Baton Farm, Shotts, ...	Do.
Whitlawburn Farm, Cambuslang,	Do.
East Glentore Farm, Longriggend,	Do.
Dalmacoulter Farm, Airdrie, ...	Do.
Wintercleugh Cottage, Allershaw,	Do.

Improvements in lighting and ventilation, etc., were made at other 54 dairy premises throughout the County.

*Registration.*—During the year, 46 certificates of registration were granted by the Local Authority, making a total of 1,678 registered dairies—1,305 producers and 373 retailers only—at the close of the year. Included in the foregoing total are 111 retailers by vehicles from outwith the County area. The approximate number of dairy animals found in registered dairy byres was 26,000.

*Exempted Premises.*—The conditions and cleanliness of exempted premises were generally found to be satisfactory.

*Burgh of Biggar.*—The registered milkshop within the Burgh, for bottled milk only, continues to be kept in a satisfactory condition.

*Burgh of Lanark.*—There are two registered producer-retailers and five registered retailers of milk only, within the Burgh, and the premises were all found to be kept in satisfactory order.

*Milk and Dairies (Scotland) Order, 1934.*—Several dairymen were dealt with during the year for failing to observe the requirements of Articles 5 to 16 of the Milk and Dairies Order, particularly to Article 13 thereof, which prohibits milk being consigned for transit by common carrier without the cans being locked or sealed, and in every case the warning had the desired effect.

### Houses Let in Lodgings.

Owing to the general scarcity of suitable housing accommodation in certain districts of the County, the registration of houses let in lodgings is still in abeyance. Numerous inspections were made, however, of houses where single lodgers were kept, or apartments sub-let to families, and action was taken where gross overcrowding was found.

Inspections were made of the only registered premises at Carluke and Strathaven, and in the case of the premises at Carluke a great improvement in the standard of cleanliness is desired. The keeper has been warned. The registered premises at Castle Street, Strathaven, have now ceased to be used as a house let in lodgings.



### Offensive Trades.

There are within the County area seventeen private slaughter-houses and these are situated as follows:—Abington; Carnwath; Crawford; Carstairs Estate Home Farm (Sheepery); Lanark (Knackery); Ponfeigh; Symington (Sheepery); Hareshawhead, Strathaven (Sheepery); Newarthill; Omoa (Knackery); Chapelhall; Caldercruix; Greengairs; Longriggend; Cleland (2); and Harthill. In the course of the year regular visits of inspection were made, and, although the structural conditions are not quite satisfactory in some cases, the premises were all found in a clean condition.

*Public Abattoirs.*—There are ten abattoirs in operation belonging to the Local Authority, these being situated at Carluke, Douglas, Forth, Lesmahagow, Blantyre, Bellshill, Larkhall, Shotts, Stonehouse and Strathaven. All the premises were kept in a satisfactory condition during the year.

*Other Offensive Businesses.*—The operations at the Knackery at Omoa, where the manufacture of manure is also engaged in, continue to be conducted in a satisfactory manner.

The oil extracting plant at the fish meal and manure works at Rutherglen has now been discontinued and the works are only used for storage accommodation for the finished product, and for the purpose of drying coffee extract.

The blood manure and tallow works at Carntyne, Shettleston, were carried on satisfactorily during the year, as also was the bone meal and tallow work at Garthamlock, Shettleston. At the latter premises the vapour treatment plant, referred to in last Annual Report, was duly installed. The noxious vapours are purified by condensation and chlorination, and, so far, the plant has proved a success.

At Braidwood the bone work was found to be kept in good order, and the business conducted in a satisfactory manner.

### Unsound Food and Food Inspection.

During the year there were 1,498 inspections of shops and other premises where foodstuffs were stored, and two seizures of fish, amounting to 14 lbs., were made. Particulars as to the inspection of meat are given in the County Meat Inspector's Report.

Whilst the quality of the foodstuffs was generally found to be good, the condition of some of the premises where fruit, etc., was stored left much to be desired.

One fish hawker was warned to place his goods clear of the exhaust fumes from his motor vehicle.

An inspection was made of premises situated within the Burgh of Lanark where ice-cream was being manufactured, the product being retailed within the Burgh and surrounding district. The premises consisted of a dilapidated brick and wood built shed against the back wall of a tenement property. Preparation and heating of ingredients were done within a dwelling-house, and utensils were washed and scalded in the boiler of a domestic wash-house common to other tenants of the property. It was pointed out to the manufacturer that such arrangements were most undesirable and he was asked to provide suitable premises. This he was not prepared to do, however, and the business was discontinued forthwith.

### **Pigstyes.**

Regular inspections of pigstyes were made during the year, and, with a few exceptions, the premises were found to be kept in satisfactory order and free from nuisance conditions.

One application for sanction to erect a pigsty at Whifflet Plots, Coatbridge, was granted, and one application in respect of premises at Mayfield, Newhouse, was refused by the Local Authority.

Provisional sanction was also granted in respect of new piggeries to be erected outwith populous places at Nos. 14, 15 and 16 Small Holdings, Cathburn, Newmains; 4 Clydesdale Street, Larkhall; Nos. 3, 4, 5, 7, 8, 11, 14, 15, 19, 21, 23, 24 and 25 Stonebyres Small Holdings Scheme, Lanark; Nos. 2 and 7 Small Holdings, Lenzie; Thankerton Plots, Holytown; Easterhouse, Baillieston; Allershaw, Wintercleugh; Stoneymeadow, High Blantyre; Ayr Road, Larkhall; No. 11 Small Holding, Easter Queenslie, Shettleston; Shawhead Plots, Whifflet; Capelrig Farm, East Kilbride; No. 10 Sidehead Holding, Stonehouse.

The attention of the owner of a large piggery at Newhouse was directed to the unsatisfactory drainage and dungstead arrangements. Subsequently a new dungstead was provided and the building of a septic tank is being proceeded with. An application by the owner to extend the piggery premises has been continued by the Local Authority until the effect of the proposed drainage improvements has been ascertained.

Plans were submitted for the extension of the piggery premises at Easterhouse House, Baillieston, and were approved, provided suitable treatment was given to the sewage before its discharge to Easterhouse Burn. The owner is to provide a more suitable type of septic tank and a filter with revolving-arms spray. The premises were under construction at the end of the year.

*Small Holdings.*—Considerable trouble has been caused through the occupiers of Small Holdings at Claddens, Lenzie, referred to in last Annual Report, keeping pigs under conditions which could not be approved by this Department. One of the occupiers was found to be keeping a large number of pigs without previous notification being given to this Department. The pigs were housed in the steading buildings and the drainage was allowed to discharge to a field drain which polluted the water supply to a railway cottage some distance away. The matter was brought to the attention of the Board of Agriculture, and we insisted that proper plans be submitted by the Small-holders for approval. After some difficulty this was done, the plans showing proper treatment facilities for the sewage. Other Small-holders in the same Scheme have since submitted plans for approval on the same lines, and the work of erecting the piggery premises is proceeding.

Plans prepared by the Department of Agriculture were submitted by the Small-holder of No. 10 Holding, Easter Queenslie, for the erection of a piggery. Objection was taken to the arrangements for discharging the drainage of the piggery to an existing tile drain serving an adjoining Holding. It was ultimately agreed that the piggery be removed to a site where the drainage, after treatment through a septic tank and filter, would discharge into field drains within the Holder's own ground.

### Burial Grounds.

The various burial grounds throughout the County continue to be conducted in a satisfactory manner.

CHURCHYARDS, ETC.—During the year, three interments were carried out in St. Ninian's Churchyard, Stonehouse, and two in East Kilbride Churchyard. In all cases the burials were carried out in a satisfactory manner.

Burials are still being carried out in Carmunnock Churchyard, but the new cemetery, which is now almost completely laid out, should soon be ready for use.

No burials took place during the year in Carnwath Old Churchyard, to which an Order in Council applies.

Permission was granted for the opening of ground at Tweediehall, Stonehouse Parish, for the interment of the owner. The burial took place in Bottom Kilnknowe field and was carried out satisfactorily.

The other old churchyards and burial grounds throughout the County continue to be kept in a satisfactory condition.

J. MILLAR,  
*County Sanitary Inspector.*

County Public Health Department,  
Beckford Sreet,  
Hamilton, 18th May, 1938.

## APPENDIX I.

## DEMOLITION AND CLOSING ORDERS.

					Apartments.			Total
					1	2	3	4 Houses.
<i>Avondale Parish—</i>								
51-53 Castle Street, Strathaven,	...	...	...	...	2	1	—	3
55 Castle Street, Strathaven,	...	...	...	...	—	—	—	1
61-63 Castle Street, Strathaven,	...	...	...	...	—	1	1	2
1 North Street, Strathaven,	...	...	...	...	4	—	—	4
33 Townhead Street, Strathaven (C.O.),	...	...	...	...	1	—	—	1
50 North Street, Strathaven,	...	...	...	...	4	—	—	4
					11	2	1	15
<i>Blantyre Parish—</i>								
Merry's Rows, Blantyre,	...	...	...	...	30	28	—	58
27-31 School Lane, High Blantyre,	...	...	...	...	2	4	—	6
245 Glasgow Road, Blantyre (C.O.),	...	...	...	...	—	1	—	1
217 Main Street, High Blantyre,	...	...	...	...	1	—	—	1
4-10 Alpine Street, Blantyre,	...	...	...	...	—	4	—	4
16-26 Alpine Street, Blantyre,	...	...	...	...	1	1	—	2
1-18 Clyde Row, Auchentibber,	...	...	...	...	—	18	—	18
					34	56	—	90
<i>Bothwell Parish—</i>								
10 Green Street, Bothwell,	...	...	...	...	1	3	—	4
Long Row, Carnbroe,	...	...	...	...	—	13	—	13
The Square, Carnbroe,	...	...	...	...	—	8	—	8
Turner's Building, Carnbroe,	...	...	...	...	1	—	—	1
2-8 Bellvue Terrace, Glebe Street,	...	...	...	...	...	...	...	...
Bellshill,	...	...	...	...	10	8	—	18
41 Glebe Street, Bellshill (C.O.),	...	...	...	...	8	—	—	8
360 Main Street, Bellshill,	...	...	...	...	2	—	1	3
91 Main Street, Bellshill,	...	...	...	...	3	1	—	5
536 Main Street, Miller's Land, Bells-	...	...	...	...	...	...	...	...
hill,	...	...	...	...	—	2	—	2
6-8 Lauchope Street, Chapelhall,	...	...	...	...	2	—	—	2
9 Lauchope Street, Chapelhall,	...	...	...	...	—	—	1	1

	Apartments.			Total 4 Houses.
	1	2	3	
<i>Bothwell Parish</i> —Continued.				
42-48 Lauchope Street, Chapelhall,	—	4	—	4
60-70 Lauchope Street, Chapelhall,	—	6	—	6
116-120 and 120A-C Main Street, Chapelhall, ... ..	—	6	—	6
124 and 126E Main Street, Chapelhall,	—	1	1	2
5-15 Roberton Street, Chapelhall, ...	6	—	—	6
Bailside Row, Chapelhall, ... ..	9	—	—	9
Toryglen, Chapelhall, ... ..	8	4	—	12
5 Woodneuk Street, Chapelhall, ...	1	—	—	1
10-14 Woodneuk Street, Chapelhall,	3	—	—	3
392 Old Edinburgh Road, Uddingston,	6	2	—	8
1-8 Bellgowan Terrace, 1-8 Bellside Terrace, and 38-40 Glebe Street, Bellshill, ... ..	23	34	—	57
132 Main Street, West End, Bellshill,	—	—	1	1
213 High Street, Newarthill, ...	1	—	—	1
52 Mosshall Street, Newarthill, ...	—	1	—	1
91-95 Mosshall Street, Newarthill, ...	—	3	—	3
17 Back Brick Row, New Stevenston Road, Carfin, ... ..	1	—	—	1
18-19 Legbrannock Square, Holytown,	—	2	—	2
	85	98	4	2 189

*Cadder Parish*—

Leckethill Cottages, near Moodies- burn, ... ..	1	1	—	2
85 Cumbernauld Road, Mollinsburn,	—	—	1	1
32 and 40 Chryston Road, Chryston,	—	—	2	2
55-61 Chryston Road, Chryston, ...	1	4	1	6
41-45 Cumbernauld Road, Moodies- burn, ... ..	—	1	1	1 3
Heathfield Square, Garnkirk, ...	9	30	1	40
Railway Cottages, Garnkirk, ...	—	—	1	1
	11	36	7	1 55



	Apartments.				Total Houses.
	1	2	3	4	
<i>Cambuslang—</i>					
Castle Chimmins, Castle Chimmins Road, Cambuslang, ... ..	—	—	1	—	1
9 Colebrooke Street, Cambuslang, ...	—	—	1	—	1
19 Dalton, by Cambuslang, ...	—	1	—	—	1
13 Cadoc Street, Cambuslang, ...	—	1	1	—	2
131 Hamilton Road, Cambuslang, ...	—	—	—	1 (5 apt.)	1
15-19½ Vicarland Road, Cambuslang (C.O.), ... ..	—	5	—	—	5
24-26 Lightburn Road, Cambuslang,	—	2	—	—	2
151-157 Westburn Road, Cambuslang,	—	7	—	—	7
5-9 Tabernacle Street, Cambuslang,	1	5	—	—	6
1, 3 and 7 Sauchiebog, Cambuslang (C.O.), ... ..	3	3	1	1	8
	4	24	4	1	34
				1 (5 apt.)	

*Carluke Parish—*

8 Craighill Road, Kilncadzow, Car- luke (C.O.), ... ..	—	—	—	1 (5 apt.)	1
17-19 John Street, Carluke, ...	—	2	—	—	2
	—	2	—	1 (5 apt.)	3

*Carnwath Parish—*

113-117 and 114-118 Tarbrax, ...	—	6	—	—	6
127-131 and 128-132 Tarbrax, ...	—	6	—	—	6
26 Main Street, Carnwath (C.O.), ...	—	1	—	—	1
157 Main Street, Carnwath (C.O.), ...	—	1	—	—	1
Cleugh Cottage, Wilsontown, Forth,	—	—	1	—	1
	—	14	1	—	15

					Apartments.				Total
					1	2	3	4	Houses.
<i>Dalserf Parish—</i>									
Moss Cottage, Netherburn, ...	...	—	2	—	—	2			
7-13 Montgomery Place, Larkhall,		—	4	—	—	4			
104 Wellgate Street, Larkhall, ...	...	—	—	1	—	1			
2-12 High Glengowan, Larkhall, ...	...	3	3	—	—	6			
16-26 Ashgillhead, Ashgill, ...	...	5	1	—	—	6			
107 Wellgate Street, Larkhall, ...	...	1	—	—	—	1			
126-128 Hareleeshill Road, Larkhall,		2	—	—	—	2			
18-20 Low Glengowan, Larkhall, ...	...	2	—	—	—	2			
26-28 Low Glengowan, Larkhall, ...	...	2	—	—	—	2			
30-32 Low Glengowan, Larkhall, ...	...	2	—	—	—	2			
40-46 Low Glengowan, Larkhall, ...	...	4	—	—	—	4			
31-33 Low Glengowan, Larkhall, ...	...	1	1	—	—	2			
12-16 Millheugh Brae, Larkhall, ...	...	3	—	—	—	3			
60-70 Raploch Street, Larkhall, ...	...	6	—	—	—	6			
30-36 and 40-48 Draffan Road, Nether- burn, ...	... ..	6	3	—	—	9			
71 Drygate Street, Larkhall, ...	...	—	1	—	—	1			
31 High Glengowan, Larkhall, ...	...	—	1	—	—	1			
9-11 High Pleasance, Larkhall, ...	...	4	—	—	—	4			
22-36 London Street, Larkhall, ...	...	—	8	—	—	8			
61-63 London Street, Larkhall, ...	...	1	1	—	—	2			
2 and 8 M'Neil Street, Larkhall, ...	...	2	—	—	—	2			
22-34 Percy Street, Larkhall, ...	...	—	7	—	—	7			
40-42 Drygate Street, Larkhall, ...	...	—	—	—	1	1			
					44	32	1	1	78

*Douglas Parish—*

No. 2 Property, Braehead, Douglas,	—	1	—	1	2
Cottonhouses, Douglas, ...	—	2	—	—	2
Doctor's Close, Douglas, ...	—	2	—	—	2
Doncaster House, Douglas, ...	—	—	2	—	2
Weaver's Yards, Douglas, ...	—	1	—	1	2
	—	6	2	2	10

					Apartments.			Total
					1	2	3	4 Houses.
<i>Glasford Parish—</i>								
23-29 Main Street, Chapelton,	...	...	...	...	1	2	1	— 4
Alexandria Place (10-20 Mounthilly Road), and 1-3 Main Street, Chapelton,	...	...	...	...	4	2	—	— 6
Heads, Glasford,	...	...	...	...	—	—	1	— 1
14 Main Street, Chapelton,	...	...	...	...	1	—	—	— 1
11 Glasgow Road, Chapelton,	...	...	...	...	—	1	—	— 1
9-11 Church Street, Chapelton,	...	...	...	...	2	—	—	— 2
					8	5	2	— 15
<i>Hamilton Parish—</i>								
Plotcock, Quarter,	...	...	...	...	7	—	—	— 7
<i>Lesmahagow Parish—</i>								
Turfholm, Lesmahagow,	...	...	...	...	—	1	—	— 1
<i>New Monkland Parish—</i>								
Brannan's Cottage, Darngavil, by Airdrie,	...	...	...	...	—	1	—	— 1
167 Main Street, Plains,	...	...	...	...	1	—	—	— 1
295 Stirling Road, Stand,	...	...	...	...	1	—	—	— 1
					2	1	—	— 3
<i>Old Monkland Parish—</i>								
25-31 West Maryston Road, Old Monkland,	...	...	...	...	—	4	—	— 4
33 West Maryston Road, Old Monkland,	...	...	...	...	—	2	—	— 2
Commonhead Rows, Bargeddie,	...	...	...	...	8	1	—	— 9
1-22 Crosshill Square, Baillieston,	...	...	...	...	11	11	—	— 22
6A-6I Easterhouse Road, Baillieston,	...	...	...	...	—	9	—	— 9
12-16 Bredisholm Road, Baillieston,	...	...	...	...	3	—	—	— 3
30-34 Church Street, Baillieston,	...	...	...	...	3	1	—	— 4
2A Main Street, Baillieston,	...	...	...	...	1	2	—	— 3
143A, B and D Main Street, Baillieston,	...	...	...	...	—	2	1	— 3
224-228 Main Street, Baillieston,	...	...	...	...	1	4	—	— 5
133A-133D Main Street, Baillieston,	...	...	...	...	—	4	—	— 4
Bredisholm Stables, Baillieston,	...	...	...	...	—	1	—	— 1
Longmuir Square, Bargeddie,	...	...	...	...	—	27	—	— 27
					27	68	1	— 96

					Apartments.				Total Houses.
					1	2	3	4	
<i>Shotts Parish—</i>									
Bankhead, Harthill, ... ..					—	2	—	—	2
South Blair Cottage, by Harthill, ...					—	1	—	—	1
Causeyhill, by Fauldhouse, ... ..					2	—	—	—	2
Tarbrax House, Shotts, ... ..					2	1	—	—	3
167-179 Allanton Road, Allanton, Shotts, ... ..					3	4	—	—	7
220-224 Allanton Road, Allanton, Shotts, ... ..					3	—	—	—	3
150-156 Mill Road, Allanton, Shotts,					2	2	—	—	4
					12	10	—	—	22
TOTALS, ...					321	422	27	9	781
					2 (5 apt.)				

## UNDERTAKINGS.

3 and 4 Kaimend, by Carnwath, ...	—	2	—	—	2
9 Calder Road, Mossend, ... ..	1	—	—	—	1
16 Calder Road, Mossend, ... ..	—	—	—	1 (5 apt.)	1
28 Coltness Avenue, Allanton, Shotts,	—	1	—	—	1
373 Main Street, Bellshill, ... ..	2	—	—	—	2
Brown's Buildings, The Cross, Douglas,	4	1	—	—	5
5-8 Auchentibber Road, Auchentibber, High Blantyre, ... ..	—	4	—	—	4
Morrison Farm, Cambuslang, ...	—	1	—	—	1
	7	9	— 1 (5 apt.)		17

## APPENDIX II.

## SLUM CLEARANCE—DISPLACEMENT OF PERSONS.

Parish.	Locality.	Houses Allocated.	Persons Displaced.
Avondale, ... ..	Strathaven, ...	16	87
Blantyre, ... ..	Blantyre, ...	100	561
Bothwell, ... ..	Bothwellpark, ...	88	490
	Bellshill, ...	112	578
	Chapelhall, ...	36	212
	Holytown, ...	8	46
Cadder, ... ..	Chryston, ...	8	39
	Moodiesburn, ...	12	56
Cambuslang, ... ..	Cambuslang, ...	27	121
Cambusnethan, ... ..	Kingshill, ...	17	69
	Springhill, ...	1	6
Carnwath, ... ..	Carnwath, ...	5	23
Dalserf, ... ..	Larkhall, ...	60	309
Douglas, ... ..	Douglas, ...	23	114
East Kilbride, ... ..	East Kilbride, ...	16	78
Lesmahagow, ... ..	Kirkfieldbank, ...	8	46
Old Monkland, ... ..	Baillieston, ...	121	588
	Bargeddie, ...	48	247
Shotts, ... ..	Harthill, ...	7	36
TOTALS, ...		713	3,706

## APPENDIX IV.

NOTE BY COUNTY DRAINAGE, &C. ENGINEER  
AS TO SEWERS CONSTRUCTED DURING 1937.*Housing Sites—*

Situation of Sewer.	Size of Sewer and Lineal Yards.			
	9-inch	12-inch	15-inch	18-inch
Loudon Park, Strathaven, ...	52	—	—	—
Calder Street, Blantyre, ... ..	355	155	—	—
Springwell, Blantyre, ... ..	292	164	118	—
Thorn (No. 1), Bellshill, ... ..	503	—	—	—
Carfin Road, Newarthill, ... ..	335	197	—	—
Springfield, Bishopbriggs, ... ..	716	240	—	—
Mount Ellen, Gartcosh, ... ..	1,200	—	—	—
Cardowan, Steps, ... ..	1,150	390	315	—
Murray Terrace, Carnwath, ... ..	245	—	—	—
Climpy Road, Forth, ... ..	844	143	201	1,025
Station, Carstairs Junction, ...	352	—	—	—

## 152A

Locality.		Number of Occupied Houses.	Water-Closets.				Dry Closets.				Privy-middens.				Ashpits.			Houses without water and inside sink.
			2	3	4	5	2	3	4	5	2	3	4	5	2	3	4	
Aitkenhead, etc., ... ..	1,335	172	9	20	—	—	—	—	—	—	—	—	—	—	—	—	—	
Baillieston, ... ..	1,837	86	51	9	—	6	—	—	2	1	—	—	4	—	—	—	14	
Bargeddie, ... ..	440	2	2	2	1	—	1	1	9	—	—	—	5	1	1	1	39	
Bellshill, etc., ... ..	3,853	245	162	102	8	—	—	—	—	—	—	—	—	—	—	—	92	
Bishopbriggs, etc., ... ..	1,488	25	26	12	3	1	—	—	—	1	—	—	—	—	—	4	29	
Blackwood, etc., ... ..	490	22	24	—	—	—	—	—	—	2	—	—	—	—	—	—	34	
Blantyre, ... ..	3,269	319	200	152	7	—	—	—	—	2	—	—	—	—	—	—	39	
Bothwell, ... ..	894	68	31	3	—	—	—	—	—	—	—	—	—	—	—	—	—	
Braidwood, ... ..	173	5	1	1	—	—	1	—	—	6	3	3	—	3	1	1	58	
Busby, ... ..	193	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Calderbank, ... ..	472	3	—	1	2	—	—	—	—	14	2	3	36	3	—	—	176	
Cambuslang, ... ..	6,211	335	464	184	2	—	—	—	—	—	—	—	—	—	—	—	—	
Carnunnock, ... ..	201	10	5	2	—	—	—	—	—	—	—	—	—	—	—	—	10	
Carmyle, etc., ... ..	975	44	27	21	—	1	—	—	—	—	—	—	—	1	—	—	—	
Carluke, ... ..	1,589	141	29	28	2	4	1	—	—	14	2	—	—	12	2	1	150	
Carstairs, ... ..	434	53	6	1	—	—	1	—	—	—	—	—	—	1	—	—	24	
Carnwath, ... ..	255	2	7	—	—	—	—	—	—	2	4	—	—	—	—	—	36	
Chapelhall, ... ..	427	58	6	2	2	—	1	—	3	10	9	9	6	—	2	—	77	
Chryston, etc., ... ..	669	8	18	12	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cleland, etc., ... ..	689	33	21	18	3	—	—	—	—	6	4	—	1	4	3	2	24	
Coalburn, ... ..	389	18	9	2	1	—	—	—	—	22	2	—	—	—	—	—	94	
Crossford, etc., ... ..	187	39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dalzell, etc., ... ..	394	33	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	
Douglas, ... ..	379	22	10	7	—	—	—	—	—	4	1	—	—	—	—	—	34	
East Kilbride, ... ..	670	62	26	9	—	—	—	—	—	—	—	—	—	—	—	—	10	
Forth, etc., ... ..	523	5	3	1	1	9	—	—	8	—	—	—	—	6	1	5	80	
Gartcosh, ... ..	388	20	—	5	—	—	12	—	—	—	—	—	3	—	—	—	25	
Glassford, ... ..	115	4	—	—	—	—	—	—	—	2	—	—	—	3	—	—	4	
Glenboig, ... ..	524	10	1	—	—	24	4	3	19	2	2	1	13	—	—	1	125	
Glengowan, etc., ... ..	425	26	3	—	—	16	10	22	12	10	2	5	19	—	—	2	17	
Greengairs, ... ..	174	6	—	—	—	3	—	—	—	3	—	—	—	12	—	—	3	
Hamilton Road, ... ..	103	12	—	—	—													





*Special Drainage Districts—*

Situation of Sewer.	Size of Sewer and Length in Lineal Yards.									
	9-inch	12-inch	15-inch	18-inch	21-inch	24-inch	27-inch	30-inch	36-inch	48-inch
Coatshill Outfall Sewer and Sewer in Merry's Rows and Auchinraith Road, ... ..	—	646	422	165	—	—	—	—	—	—
Wooddean Outfall Sewer and Reconstruction of Blantyre Bank Outfall Sewers, ... ..	—	107	232	177	266	147	—	—	—	—
Sewer in High Street, Newarthill and Effluent Sewer from Sewage Purification Works, ... ..	70	442	22	—	32	786	—	—	—	—
Cemetery Road—Carnwath Road—Sewers, ... ..	215	—	—	—	—	—	—	—	—	—
Outfall Sewer from Jocksburn to Kirkton Avenue, Carluke, ...	12	—	—	—	93	519	295	—	473	—
Outfall Sewer from Stepps Sewage Purification Works to Bridgend, ... ..	—	—	—	38	2,347	—	1,349	—	—	—
Outfall Sewers from Glen Road and Hartwoodhill to Hawkwoodburn Sewage Purification Works, ...	—	283	398	1,250	—	—	—	60	—	—
Outfall Sewer from Mount Vernon to Daldowie Sewage Purification Works, ... ..	80	—	85	—	—	—	—	—	110	1,953
TOTALS, ... ..	377	1,478	1,159	1,630	391	3,799	295	1,409	583	1,953

The number of connections made to public sewers was 88.

*Sewage Purification Works.*—At Skellyton, Larkhall, a complete installation consisting of Rough and Fine Screening Chambers, Grit Tanks, Deep Hopper Bottom Primary Settling Tanks, Control and Distribution Chambers, Rotary Percolating Filters, Humus Tanks, Cold Sludge Digestion Tanks, Sludge Consolidation Tanks, Pump House, and Sludge Drying Beds, was constructed and is now in operation.



Situation of Sewer.	Size of Sewer in Lineal Yards.			
	9-inch	12-inch	15-inch	18-inch
<i>Housing Sites—Continued.</i>				
Ashgillhead, Ashgillhead, ... ..	195	—	—	—
Eddlewood (No. 6), Eddlewood, ...	1,315	397	—	—
New Lanark, Crosslaw, ... ..	666	—	—	—
Kirkstyle, Glenmavis, ... ..	208	—	—	—
Drumgray (No. 5), Greengairs, ...	835	330	—	—
Main Street, Greengairs, ... ..	280	—	—	—
Plains (No. 4), Plains, ... ..	590	—	—	—
Muirside (No. 3), Baillieston, ...	175	—	286	—
Calderbank (No. 5), Calderbank, ...	357	—	—	—
Eastfield, Harthill, ... ..	641	—	—	—
Shottskirk Road, Shotts, ... ..	417	—	—	—
Cambusnethan, Stonehouse, ... ..	416	—	—	—
TOTALS, ... ..	12,139	2,016	920	1,025

## APPENDIX V.

NOTE BY COUNTY WATER ENGINEER AS TO  
WATER PIPE EXTENSIONS DURING 1937.

	Yards.	Diameter of Pipe.
Newarthill Housing, Carfin Road, ...	100	4"
Do. do., ... ..	350	3"
Loanhead Road Housing, New Stevenston,	600	3"
Hillpark Housing, Bothwell, ... ..	400	3"
Goodockhill Farm, Greenhill, ... ..	450	3"
Cumbernauld Sewage Works (Dunbarton),	850	2"
Extension—Mount Cow, West Bracco and Ardenrigg Colliery Pithead Baths, Shotts,	3,300	3"
Earnockmuir, Hamilton, ... ..	400	2"
Braidwood District, ... ..	550	3"
Do., do., ... ..	550	4"
Shotts Reservoir to East End of Harthill (Whitburn Water Supply), ... ..	5,500	9"
Carstairs Lunatic Asylum, ... ..	270	6"
Do. do., ... ..	500	5"
Do. do., ... ..	300	4"
Gillbank, Sandilandgates Farms, Braidwood,	1,800	4"
Do. do., ... ..	1,950	3"
Carstairs Village, ... ..	200	4"

	Yards.	Diameter of Pipe.
Extension to Small Holdings off Sidehead		
Road, Stonehouse, ... ..	170	4"
Do. do.,	200	3"
Wattstown Housing, Greengairs, ... ..	300	3"
Duntilland Extension, Shotts (Farm, etc.),	450	2"
Greengairs Housing, New Monkland, ... ..	320	3"
Springwells Housing, Blantyre, ... ..	450	4"
Eddlewood Housing, Hamilton, ... ..	1,000	3"
Kirkintilloch Road, Bishopbriggs, ... ..	320	3"
Lockhart Street Housing, Stonehouse, ... ..	420	3"
Garngaber, Cadder, ... ..	350	3"
Eastfield Housing, Harthill, ... ..	530	3"
Mossneuk Avenue off Coltness Road, Wishaw,	60	3"
Thorn Housing, Bellshill, ... ..	600	3"
Kilncadzow, etc., Carluke, ... ..	1,000	2"
Do. do., ... ..	400	3"
Thankerton, ... ..	930	3"
Do., ... ..	600	2"
Riggside Housing, Ponfeigh, ... ..	320	3"
Dillarburn, etc., Lesmahagow, ... ..	1,400	4"
Do., do., ... ..	700	6"
Do., do., ... ..	3,450	3"
Housing Scheme off Carlisle Road, Lesmahagow, ... ..	250	3"
Do. do.,	200	4"
Auchengray, Braehead, etc., Ampherlaw		
Farm, ... ..	3,950	2"
Do. do.,	430	3"
Easter Dullatur Extension, Cumbernauld		
(Dunbarton), ... ..	400	2"
Overtown Housing, Wishaw, ... ..	500	3"
Loudon Park Housing Scheme, Strathaven,	130	3"
Glenhove Farm, Luggiebank, ... ..	430	2"
Mayberry Place, Blantyre, ... ..	90	3"
Salsburgh Housing (South of New Glasgow-		
Edinburgh Road), ... ..	900	3"
Chapelhall to Newhouse Reservoir, ... ..	2,150	12"
Dykehead Farm Extension, Stonehouse,	330	2"
Bellmont Cottages, Stane, ... ..	530	3"
Linthaugh, Stonehouse, ... ..	500	3"
Candermill, Stonehouse, ... ..	350	3"

# Report of the County Building Inspector

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## BUILDING BY-LAWS.

The total number of plans lodged for approval amounted to 280. As in former years, a considerable proportion of these had not been prepared in accordance with the By-laws, especially those from some of the outlying districts. It was found necessary, in a great many cases, to have meetings on the site with the owners and architects before matters could be properly adjusted. All disconformities were reported to and dealt with by the committee. Five sets of plans were withdrawn.

The nature of the buildings, as indicated by the plans lodged, were as follows :—

NEW BUILDINGS.—Houses and shops, 142 ; workshops, 14 ; public buildings, 13 ; and other buildings, 20 ; total plans, 189.

ALTERATIONS IN THE MODE OF OCCUPANCY.—Houses and shops, 61 ; workshops, 10 ; public buildings, 8 ; and other buildings, 12 ; total plans, 91.

12,697 inspections were made during the course of construction of the buildings. 6 contraventions of the Building By-laws were discovered, and these were reported to and dealt with by the committee.

2,065 applications of the smoke test were made to the drains and plumber work in connection with the sanitary fittings of new properties. In several cases, the work was found defective and retests had to be made, but, on the whole, the work done by the contractors was of a very good standard.

In addition to the plans lodged under the Building By-laws, 364 plans were received, and approval granted for various erections of a minor character.

## Housing (Scotland) Act, 1925.

No applications under Section III of the above Act were received for the erection or conversion of existing dwellings into two-apartment houses.



### **Housing (Scotland) Act, 1930.**

661 houses in Improvement Schemes were inspected and reported on to the County Clerk as completed and eligible for grant, said houses complying with all the requirements of the Department of Health for Scotland.

### **Housing (Scotland) Act, 1935.**

295 houses in Decrowding Schemes were inspected and reported on to the County Clerk as completed and eligible for grant, said houses complying with all the requirements of the Department of Health for Scotland.

### **Housing (Rural Workers) Act, 1926.**

60 applications were received during the year for assistance to make alterations and improvements to 107 dwellings for the accommodation of agricultural workers and others whose economic condition is substantially the same as such workers, and a grant was sanctioned by the committee in each case.

It has been rather difficult to get applicants for grants under the Act to appreciate the standard indicated in the Council's scheme and the desires of the Department of Health in the matter.

When a more complete improvement than that shown by the plan and specification lodged was asked for, objections were nearly always raised. Suggestions by helpful sketches were made and in many cases adopted, but there was a feeling that the requirements in the area were too stringent.

The Report on Rural Housing in Scotland by the Scottish Advisory Committee was to my mind long overdue, and it has done more than anything to strengthen the hands of officials in applying the Act as originally intended.

Unfortunately, during the sitting of the Committee and since their report was issued building costs have been gradually rising. As a result it is hardly possible in many cases where location and water supply difficulties are exceptional to get a satisfactory reconditioning below £300 to £350 stg. Where excavation and building of retaining walls are necessary to overcome embedding of walls the cost may even exceed £400 stg. Applicants therefore hesitate

to proceed with improvements, and if the enquiry had been made eight years earlier and the report issued then when costs were more normal many of the improvements carried out during that period would have been more satisfactory than they are to-day.

I entirely agree with the views expressed in the report, and it has helped me greatly in my efforts to get any improvements since its issue carried out on the lines I had always hoped for.

In the majority of applications dealt with during the year the houses affected have all been brought up to the three-apartment standard, and as near as possible with the floor areas for housing recommended by the Department of Health.

Those detailed in the undernoted list have all been carefully supervised during the execution of the work, and the reconditioned dwellings obtained are of a satisfactory standard.

Building operations in connection with 47 applications (58 houses) were completed during the year, and Certificate "B" for payment of grant issued to the respective owners. The properties on which improvements were completed are as follows:—

(118) Glentagart Cottage, Douglas—1 three-apartment house. Part of byre was converted into scullery with wash-boiler, tub and sink combination and w.c.; a porch having larder was provided at rear door, water supply led on and a new drainage system with septic tank constructed, at a cost of £115 7s. 9d.

(240) East Town, Nemphlar, Lanark—1 two-apartment house. Bed recesses in kitchen and room removed, walls treated for dampness, lighting of room improved, scullery built at rear having sink, larder and w.c., tub and sink combination provided in wash-house, roof repaired and reslated, porch provided and new drainage system with septic tank constructed, at a cost of £198 18s. 4d.

(249) Lodge, Easterhouse House, Baillieston —1 three-apartment house. An annexe was built at rear, comprising bedroom and scullery with wash-boiler, tub and sink combination, larder and bathroom, new wood floors laid, walls treated for dampness, water supply led on, roof overhauled and reslated and new drainage system with septic tank constructed, at a cost of £183 10s.

(255) Easter Crosshill Farm, Bishopbriggs—2 two-apartment houses. Area of kitchen was enlarged by removal of partition and annexe erected at rear, comprising scullery with sink and larder, also bathroom, tub and sink combination and wash-boiler provided in mutual wash-house and new drainage system with septic tank constructed, at a cost of £255 19s. 6d.

(256) Westerhill Farm, Bishopbriggs—2 two-apartment houses. Area of kitchen was enlarged by removal of partition and annexe erected at rear, comprising scullery with sink and larder, also bathroom, tub and sink combination and wash-boiler provided in mutual wash-house, and new drainage system with septic tank constructed, at a cost of £265 11s. 4d.

(257) Monkshead Farm, Douglas—1 four-apartment house. Part of adjoining outbuilding was partitioned off to provide scullery with tub and sink combination, wash-boiler, also larder; w.c. provided, stone flag floor lifted and new wood floor laid, lighting of bedrooms improved, roof overhauled and reslated, water supply led on and new drainage system with septic tank constructed, at a cost of £347 9s.

(260) Lochlyock Farm, Carmichael—1 two-apartment house. Internal partitions were removed and re-arranged, new window slapped in rear wall to improve lighting and ventilation, walls treated for dampness, annexe built at side to provide scullery with tub and sink combination, and wash-boiler, also larder, and new drainage system with septic tank constructed, at a cost of £288 5s. 8d.

(261) Bridgend, Symington—2 three-apartment houses. Property was converted into two three-apartment houses and annexe added to rear of each to provide scullery with tub and sink combination, wash-boiler, also bathroom and larder, water supply led on, new wood floors laid, walls treated for dampness, ground at rear excavated and new drainage system with septic tank constructed, at a cost of £589 1s. 9½d.

(262) Cardingmill, Symington—1 three-apartment house. An annexe was erected at rear, comprising scullery with wash-boiler, tub and sink combination, larder and bathroom, walls treated for dampness and plaster plates fitted, area under floors cleaned out and new wood floors laid, water supply led on and new drainage system with septic tank constructed, at a cost of £271 7s. 4½d.

(263) Bellfield Level Crossing, Coalburn—2 three-apartment houses. In each side an annexe was erected at side, comprising scullery with sink, larder and bathroom, water supply led on, new dormer windows provided in attic bedrooms, mutual wash-house with wash-boiler and tubs provided and new drainage system with septic tank constructed, at a cost of £308 17s. 2d.

(265) Bankhouse Cottage, Lesmahagow—1 three-apartment house. Two two-apartment houses were converted into one house of three apartments, scullery with wash-boiler, tub and sink combination, bathroom, larder and press accommodation, water supply led on and new drainage system constructed, at a cost of £199 11s. 9d.

(266) Woodlea Cottage, Coalburn—1 three-apartment house. Bedroom annexe at rear was demolished and rebuilt, also new wash-house with wash-boiler, and tub and sink combination, w.c. compartment enlarged to take bath, scullery renovated and larder provided, water supply led on and new drainage system for annexe constructed, at a cost of £186.

(268) East Lodge, Birkwood, Lesmahagow—1 three-apartment house. An addition was made to rear of house to enlarge living room and provide scullery with sink and larder, existing scullery converted into bathroom with w.c., hot water supply provided and new drainage system constructed, at a cost of £328 19s. 5d.

(269) South Lodge, Birkwood, Lesmahagow—1 three-apartment house. Scullery was erected at rear with wash-boiler, tub and sink combination, floor area of bedroom enlarged, outbuildings altered to provide bathroom, larder and coal cellar, water supply led on and new drainage system with septic tank constructed, at a cost of £269 9s. 4d.

(270) West Lodge, Birkwood, Lesmahagow—1 three-apartment house. Scullery was enlarged and wash-boiler, tub and sink combination installed, annexe to scullery built, comprising bathroom and larder, hot water supply installed, coal cellar built and new drainage system constructed, at a cost of £251 18s. 5½d.

(271) Pathhead, Birkwood, Lesmahagow—1 five-apartment house. Modern sanitary fittings installed, electric light provided and new drainage system with septic tank constructed, at a cost of £94 11s. 2d.

(272) Monkstable, Birkwood, Lesmahagow—1 three-apartment house. Wash-house was converted into scullery with wash-boiler, tub and sink combination, and bathroom, larder formed in living room, hot water supply introduced, walls treated for dampness, also strapped and lathed, electric lighting installed and new drainage system with septic tank constructed, at a cost of £220 0s. 1½d.

(274) 63-65 Cumbernauld Road, Mollinsburn—2 three-apartment houses.

(1) Annexe erected at rear, comprising scullery with wash-boiler, tub and sink combination, larder and coal store, walls treated for dampness, strapped and plastered, bathroom provided, ceiling height of attic bedroom raised and lighting improved.

(2) Scullery was formed having wash-boiler, tub and sink combination and larder, walls treated for dampness, strapped and plastered, bathroom provided, ceiling height of attic bedroom raised and lighting improved.

A new drainage system with septic tank was constructed in connection with the above improvements. Total cost of improvements, £491 11s 10d.

(277) Cottage No. 4, Uddington, Douglas—1 two-apartment house. Annexe was built at rear, comprising scullery having wash-boiler, tub and sink combination and bathroom, larder formed in kitchen, new wood floor laid in kitchen, water supply led on and new drainage system discharging into common septic tank constructed, at a cost of £132 6s. 10d.

(278) Cottage No. 6, Uddington, Douglas—1 two-apartment house. Lighting of kitchen and room was improved, built-in beds removed, wash-boiler and tub and sink combination installed in scullery, which was altered to provide larder and bathroom, water supply led on and new drainage system discharging into common septic tank constructed, at a cost of £119 13s. 10d.

(279) Cottage No. 7, Uddington, Douglas—1 three-apartment house. Addition was made to gable to increase floor area of bedroom, new wood floor laid in kitchen, new larder formed, scullery partitioned off to provide bathroom, wash-boiler and tub and sink combination installed in scullery, and new drainage system with septic tank in conjunction with Cottage No. 8 constructed, at a cost of £153 9s.



(280) Cottage No. 8, Uddington, Douglas—1 two-apartment house. Built-in beds removed, new wood floor laid in kitchen, back wall of scullery heightened, lighting improved, wash-boiler and tub and sink combination provided in scullery, addition made to scullery to provide bathroom, water supply led on and new drainage system with septic tank in conjunction with Cottage No. 7 constructed, at a cost of £136 15s. 6d.

(282) Loch Grog Farm, Bishopbriggs—1 three-apartment house. Addition was erected at gable, comprising bedroom, scullery with wash-boiler, tub and sink combination, larder and bathroom, water supply led on, lighting of living room improved, ground excavated at front, new drainage system with septic tank constructed, at a cost of £250 2s. 7d.

(283) Fallburns, Thankerton—1 three-apartment house. Part of store partitioned off to form scullery pantry with tub and sink combination, existing pantry converted into bathroom, water supply led on and new drainage system with septic tank constructed, at a cost of £145 11s. 3d.

(284) Sidehead Farm, Strathaven—1 three-apartment house. Apartments re-arranged and annexe erected at rear to form house of three apartments, scullery, bathroom and larder, walls treated for dampness, stapped and plaster plated, lighting of apartments improved, ceiling height improved, water supply led on and new drainage system with septic tank constructed, at a cost of £241 16s. 11d.

(285) North Lodge, Carstairs Estate—1 three-apartment house. Annexe erected at gable, comprising scullery with wash-boiler, tub and sink combination and bathroom, existing scullery converted into larder, area under floors asphalted and new wood floors laid in kitchen and back bedroom, chimneyheads made satisfactory, lighting of kitchen improved and new drainage system with septic tank constructed, at a cost of £378 13s. 6d.

(286) Stoneyknowes, Douglas Water—1 three-apartment house. Part of store converted into scullery with sink, existing larder converted into bathroom, water supply led on and new drainage system with septic tank constructed, at a cost of £131.

(288) Barncluith Lodge, Hamilton—1 three-apartment house. Annexe erected at front, comprising bedroom and scullery with sink, larder and w.c., ceilings of existing apartments raised, walls



treated for dampness, lighting improved, part of wash-house partitioned off and bath installed, straw thatch removed from roof, sarking and felt fitted and slated, and new drainage system with septic tank constructed, at a cost of £377 12s. 5d.

(289) Burnside, Symington—1 three-apartment house. Boxroom converted into bathroom, kitchen and bedroom floors lifted and made satisfactory, under floor ventilation introduced, kitchen walls treated for dampness, scullery repaired, larder provided, water supply led on and new drainage system constructed, at a cost of £120 18s. 2d.

(293) Miners' Welfare Hall, Fence, Kirkmuirhill—1 four-apartment house. Miners' Welfare Hall was converted into house of four apartments, scullery, bathroom, larder and press accommodation, at a cost of £247 2s. 10½d.

(297) East End Farm, East Kilbride—1 three-apartment house. Two houses were converted into one house of three apartments with bathroom, annexe erected at rear to provide scullery with wash-boiler, tub and sink combination, larder and coals, water supply led on, stone floors removed, areas cleaned out and treated with asphalte and new wood floors provided, walls treated for dampness, ceiling height raised, lighting of apartments improved and new drainage system with septic tank and filter constructed, at a cost of £341.

(298) Chapland Cottages, Lanark—2 three-apartment houses. In each case bed recesses in living room were removed, larder provided in scullery, also wash-boiler and tub and sink combination, boxroom converted into bathroom and new drainage system with septic tank and filter constructed, at a cost of £461 6s. 10d.

(299) 22-28 Station Road, Law—4 two-apartment houses. In each case sculleries were enlarged, wash-boiler, tub and sink combination installed, bathroom and larder provided, and new drainage system constructed, at a cost of £621 14s. 8d.

(300) Glen's Cottage, Kame End, Carnwath—1 three-apartment house. Annexe built at rear to provide scullery with wash-boiler, tub and sink combination, bathroom, larder and coal store, lighting of kitchen improved, attached outbuilding converted into bedroom, and walls heightened with new reslated roof, water supply led on and new drainage system with septic tank constructed, at a cost of £532 3s. 10d.

(305) Cowgill Cottage, Lamington—1 three-apartment house. Annexe erected at rear, comprising scullery with wash-boiler, tub and

sink combination, bathroom and larder, water supply led on, walls of kitchen treated for dampness and new drainage system with septic tank constructed, at a cost of £238 18s. 10d.

(306) Boghouse Cottage, Crawfordjohn—1 two-apartment house. Annexe built at rear, comprising scullery, with wash-boiler, tub and sink combination and bathroom, bed partition in living room removed, part of larder formed into press, lighting of rooms improved, water supply led on, slating, rones and conductors overhauled, space beneath floors ventilated and new drainage system with septic tank constructed, at a cost of £291 17s. 11d.

(307) Castlemains, Crawford, No. 1—1 three-apartment house. One apartment was converted into scullery with wash-boiler, tub and sink combination, bathroom, larder and coal store, ceiling height raised in living room and two bedrooms, new wood floors laid throughout, walls treated for dampness, strapped and lathed, lighting of the various apartments improved, slating overhauled, water supply led on and new drainage system with septic tank constructed, at a cost of £275 16s. 10½d.

(308) Castlemains, Crawford, No. 2—1 three-apartment house. Two two-apartment houses were converted into one house of three apartments, scullery, bathroom and larder, etc., lighting of apartments improved, water supply led on and new drainage system with septic tank constructed, at a cost of £245 19s. 6d.

(311) Easter Mosshat Farm, near Auchengray—2 three-apartment houses.

Ground floor house—Water supply led on, wash-boiler, tub and sink combination provided in scullery, bathroom formed, stone flags removed in main passage, area cleaned and new wood floors laid here and in bedroom.

Upper floor house—Living room converted into bedroom, large bedroom formed into kitchen and other apartments converted into scullery with wash-boiler, and tub and sink combination, bathroom and larder, water supply led on.

External walls picked and repointed, roof and rones made satisfactory, and new drainage system with septic tank constructed.

Total cost of improvements £328 5s. 1d.

(313) Ryeflat Cottage, Carstairs—1 three-apartment house. Internal partitions re-arranged to provide living room and two bedrooms, annexe built at front, comprising scullery, with wash-

boiler, tub and sink combination, bathroom, larder and coal cellar, walls treated for dampness, roof repaired, and new drainage system with septic tank constructed, at a cost of £303 2s. 4d.

(320) Troloss, Elvanfoot—1 five-apartment house. Bathroom provided off upper floor and new drainage system with septic tank constructed, at a cost of £194 1s. 9½d.

(326) Broomhill Cottage, Broomhill Farm, Carnwath—1 three-apartment house. Position of living room and bedroom reversed, centre boxroom converted into scullery with wash-boiler, tub and sink combination, annexe erected at rear to provide bedroom, bathroom and larder, walls treated for dampness, lighting of existing apartments improved, slating, walls and chimneyheads overhauled, and new drainage system with septic tank constructed, at a cost of £330 16s. 9d.

(328) Windy Ha' Cottage, Coalburn—1 three-apartment house. Wash-boiler, and tub and sink combination fitted in scullery, which was rebuilt and extended to provide bathroom, and new drainage system constructed, at a cost of £158 17s. 6d.

(330) Netherfauldhouse, Lesmahagow—1 four-apartment house. Annexe built at rear, comprising scullery with sink, bathroom and larder, ceiling height of attic bedrooms raised and lighting of each improved, water supply led on and new drainage system with septic tank constructed, at a cost of £212 17s.

(333) Easterhouse, Murdostoun—1 three-apartment house. Existing boiler house divided to provide scullery with wash-boiler, tub and sink combination and bathroom, stone floor lifted in small bedroom and new wood floor laid, walls treated for dampness, larder formed, water supply improved, and new drainage system with septic tank constructed, at a cost of £383 11s. 4d.

(335) Easterhouse, Murdostoun—2 three-apartment houses. Addition was made to rear to provide bedroom, scullery with wash-boiler, tub and sink combination, bathroom and larder for each house, water supply led on, and new drainage system with septic tank constructed, at a cost of £548 14s. 9d.

(345) 4 Langbyres Road, Bellside, Cleland—1 three-apartment house. Two houses converted into one of three apartments with bathroom, annexe erected at front to provide scullery with wash-boiler, tub and sink combination, larder and coal cellar, new wood floors laid where required, internal walls made satisfactory, and new drainage system constructed, at a cost of £209 0s. 6d.

TABLE I.—NUMBER OF SETS OF PLANS LODGED DURING THE YEAR 1937, IN ACCORDANCE WITH BY-LAWS 41 AND 51, CLASSIFIED ACCORDING TO THE NATURE OF THE BUILDINGS SET FORTH IN PLANS.

PARISH.	Plans lodged for New Buildings under By-Law 41.				Plans lodged for alterations in mode of occupancy of Existing Buildings under By-Law 51.			
	Houses and Shops.	Work-shops.	Public Buildings. *	Others. †	Houses and Shops. ‡	Work-shops.	Public Buildings. §	Others. 
Avondale, - -	8	1	1	1	1	—	—	—
Biggar, - - -	3	—	—	—	1	—	—	—
Blantyre, - -	1	1	—	—	1	—	2	1
Bothwell, - -	15	2	1	2	2	2	—	4
Cadder, - - -	18	—	3	—	4	—	—	—
Cambuslang, -	—	1	—	2	3	—	1	—
Cambusnethan, -	6	—	—	2	2	1	1	—
Carlisle, - -	8	1	—	1	4	1	—	—
Carmichael, -	—	—	—	—	—	—	—	—
Carmunnock, -	—	2	—	—	—	—	—	—
Carnwath, - -	3	—	1	—	3	1	—	—
Carstairs, - -	—	—	—	—	2	—	—	1
Coulter, - - -	—	—	—	—	—	—	—	—
Covington and Thankerton, -	2	—	—	—	—	—	—	—
Crawford, - -	—	—	—	—	2	—	—	—
Crawfordjohn, -	—	1	—	—	1	—	—	—
Dalserf, - - -	2	—	—	1	2	—	1	—
Dalziel, - - -	—	1	—	—	—	2	—	—
Dolphinton, -	—	—	—	—	—	—	—	—
Douglas, - - -	3	—	—	—	2	—	—	—
Dunsyre, - - -	—	—	—	—	—	—	—	—
East Kilbride, -	9	1	—	1	7	—	1	1
Glasford, - -	2	—	—	—	1	—	—	—
Glasgow, - - -	5	—	—	2	1	—	—	—
Hamilton, - -	2	—	—	—	1	—	—	1
Lamington and Wandel, - -	—	—	—	—	—	—	—	—
Lanark, - - -	1	—	1	—	1	—	—	1
Libberton, - -	1	—	—	—	2	—	—	—
Lesmahagow, -	3	—	—	—	6	—	1	—
New Monkland, -	3	1	1	—	2	—	—	—
Old Monkland, -	20	1	4	3	3	1	—	1
Pettinain, - -	—	—	—	1	—	—	—	—
Rutherglen, -	14	—	—	—	—	1	—	—
Shotts, - - -	5	1	1	3	4	—	1	2
Stonehouse, - -	1	—	—	—	2	1	—	—
Symington, - -	2	—	—	1	—	—	—	—
Walston, - - -	—	—	—	—	—	—	—	—
Wiston and Robertson, -	—	—	—	—	1	—	—	—
<b>TOTAL, - -</b>	<b>142</b>	<b>14</b>	<b>13</b>	<b>20</b>	<b>61</b>	<b>10</b>	<b>8</b>	<b>12</b>

\* Includes 4 Schools, 4 School Buildings, 2 Mission Halls, 2 Cinemas, 1 Health Institute.

† Includes 6 Offices, 1 Canteen, 1 Police Station, 2 Band Halls, 1 Treatment Block, 2 Lock-ups, 1 Children's Home, 1 Bowling Green Pavilion, 1 Roadhouse, 2 Laboratories, 1 Hall, 1 Store, 1 Recreation Hall.

‡ In this column are included plans for additions to Dwelling-houses. In this way 75 apartments were added to 45 houses.

§ Includes additions and alterations to:—4 Miners' Welfare Institutes, 1 School, 1 Church Hall, 2 Cinemas.

|| Includes alterations to 1 Store, 1 Creamery, 1 Billiard Hall, 1 Club House, 1 Nurses' Home, 3 Offices, 1 Bank, 1 Institution, 1 Recreation Room, 1 Recreation Hall.

TABLE II.—SHOWING NUMBER OF HOUSES AND SHOPS SET FORTH IN PLANS SUBMITTED UNDER BY-LAWS REGULATING THE BUILDING OR RE-BUILDING OF HOUSES OR BUILDINGS DURING 1937.

PARISH.	NEW BUILDINGS OF						TOTAL.
	One Apartment.	Two Apartments.	Three Apartments.	Four Apartments.	Five Apartments and upwards.	Shops.	
Avondale, - -	—	—	28	15	17	—	60
Biggar, - - -	—	—	—	4	2	—	6
Blantyre, - -	—	—	—	—	1	—	1
Bothwell, - -	—	—	88	63	37	2	190
Cadder, - - -	—	—	67	34	4	1	106
Cambuslang, -	—	—	—	—	—	—	—
Cambusnethan, -	—	—	40	32	21	—	93
Carluke, - - -	—	—	3	3	2	—	8
Carmichael, - -	—	—	—	—	—	—	—
Carmunnock, - -	—	—	—	—	—	—	—
Carnwath, - - -	—	—	3	8	—	1	12
Carstairs, - -	—	—	—	—	—	—	—
Coulter, - - -	—	—	—	—	—	—	—
Covington and Thankerton, -	—	—	1	—	1	—	2
Crawford, - - -	—	—	—	—	—	—	—
Crawfordjohn, -	—	—	—	—	—	—	—
Dalserf, - - -	—	—	76	70	28	—	174
Dalziel, - - -	—	—	—	—	—	—	—
Dolphinton, - -	—	—	—	—	—	—	—
Douglas, - - -	—	—	29	13	8	1	51
Dunsyre, - - -	—	—	—	—	—	—	—
East Kilbride, -	—	—	2	15	3	8	28
Glasford, - - -	—	—	5	4	8	—	17
Glasgow, - - -	—	—	166	4	1	—	171
Hamilton, - - -	—	—	40	28	20	1	89
Lamington and Wandel, - -	—	—	—	—	—	—	—
Lanark, - - -	—	—	—	1	—	—	1
Libberton, - -	—	—	—	—	1	—	1
Lesmahagow, - -	—	—	40	33	12	—	85
New Monkland, -	—	—	28	28	8	—	64
Old Monkland, -	—	—	131	83	46	—	260
Pettinain, - - -	—	—	—	—	—	—	—
Rutherglen, - -	—	—	43	10	37	—	90
Shotts, - - -	—	—	125	108	44	1	278
Stonehouse, - -	—	—	35	34	8	—	77
Symington, - -	—	—	4	5	—	—	9
Walston, - - -	—	—	—	—	—	—	—
Wiston and Roberton, -	—	—	—	—	—	—	—
TOTAL, - - -	—	—	954	595	309	15	1,873



## MEAT INSPECTION—SLAUGHTERHOUSES, Etc.

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ALFRED NIMMO, *Meat Inspector*.

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As General Superintendent of Abattoirs and County Meat Inspector, I have to submit the following report for the year 1937. The work during the year was carried out by Mr. Alexander Cameron, County Meat Inspector, who retired at the end of the year, after thirty-four years' useful service to the cause of Meat Inspection. He was responsible for the Standardisation of Meat Inspection in the County, prior to the Public Health (Meat) Regulations (Scotland), 1932. The best wishes of the staff for good health and every happiness are with him in his retirement.

It will be observed from Table I that the total number of animals slaughtered at the various abattoirs was 28,552, out of which 8,424 animals were found to contain disease in some form.

Of the 8,424, there were 1,657 carcasses totally or partially condemned, and 6,767 carcasses found with local conditions in which organs only were condemned, these combined being 29·50 per cent. of the total animals slaughtered, as compared with 30·2 per cent. the previous year.

Of the 11,908 cattle slaughtered at the various abattoirs, 396 were sent in by the County Veterinary Inspector under the Tuberculosis Order, and of these 334 were totally or partially condemned, and the remainder passed, being cases in which organs only were condemned.

Tables II and III show in detail, for each slaughterhouse, the class of animal slaughtered and the extent to which disease was prevalent, both in abattoirs and private slaughterhouses throughout the district.

Table IV shows the number of organs and the diseases for which they were condemned in those cases where organs only were condemned in abattoirs and private slaughterhouses.



TABLE I.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.											
		Tuberculosis.						Other Diseases.					
		Carcases.				Organs only.		Carcases.				Organs Only.	
Wholly.		Partially.		Wholly.				Partially.					
Class.	Num- ber.	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Cows, ...	7,349	455	6.17	955	12.99	3,160	42.99	71	.96	36	.48	2,278	30.99
Heifers, ...	2,126	18	.84	32	1.50	225	10.58	1	.04	1	.04	94	4.42
Bulls, ...	125	3	2.40	4	3.20	13	10.40	1	.80	5	4.00	9	7.20
Bullocks, ...	2,308	6	.26	14	.41	56	2.42	3	.12	1	.04	104	4.50
Calves, ...	3,345	5	.14	—	—	7	.20	10	.29	3	.08	5	.14
Sheep, ...	8,501	—	—	—	—	—	—	16	.18	2	.02	702	8.25
Swine, ...	4,798	5	.10	6	.12	100	2.08	3	.06	1	.02	14	.28
Goats, ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Total, ...	28,552	492	1.72	1,011	3.54	3,561	12.48	105	.36	49	.17	3,206	11.22

*Bellshill.*— TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.						
		Tuberculosis.			Other Diseases.			
Class.	Number.	Carcases.		Organs only.	Carcases.		Organs only	
		Wholly.	Partially.		Wholly.	Partially.		
Cows, ...	3,147	236	417	1,752	33	24	1,726	
Heifers, ...	450	1	7	52	2	2	40	
Bulls, ...	22	3	3	1	—	—	1	
Bullocks, ...	206	1	3	4	2	—	13	
Calves, ...	101	1	—	—	5	—	4	
Sheep, ...	1,872	—	—	—	3	1	274	
Swine, ...	292	2	—	9	1	—	5	
Goats, ...	—	—	—	—	—	—	—	
Total, ...	6,090	244	430	1,818	46	27	2,063	

*Bellshill.*—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

Disease.	Cows.	Heifers.	Bulls.	Bullocks.	Calves.	Sheep.	Swine.	Total
Abscess, ...	2	—	—	—	—	1	—	3
Actinomycosis, ...	1	—	—	—	—	—	—	1
Anaemia, ...	1	—	—	—	—	—	—	1
* Dead in Byre, ...	1	—	—	—	—	—	—	1
Dropsy, ...	10	—	—	1	—	—	—	11
Emaciation, ...	—	—	—	—	—	1	—	1
Gastro Enteritis, ...	—	—	—	—	1	1	1	3
Hydraemia, ...	—	—	—	—	1	—	—	1
Inflammation, ...	1	—	—	—	—	—	—	1
Injury, ...	12	2	—	—	—	—	—	14
Jaundice, ...	1	—	—	—	—	—	—	1
Lymphadenitis, ...	—	—	—	—	—	1	—	1
Malignant Neoplasms, ...	2	—	—	—	—	—	—	2
Neoplasm, ...	1	—	—	—	—	—	—	1
Peritonitis, ...	2	—	—	1	—	—	—	3
Pleurisy, ...	4	—	—	—	—	—	—	4
Pneumonia, ...	1	—	—	—	—	—	—	1
Pyæmia, ...	2	—	—	—	—	—	—	2
Septicaemia, ...	4	—	—	—	2	—	—	6
Septic Mastitis, ...	4	—	—	—	—	—	—	4
Septic Metritis, ...	3	—	—	—	—	—	—	3
Septic Nephritis, ...	2	—	—	—	1	—	—	3
Septic Pericarditis, ...	2	2	—	—	—	—	—	4
Septic Peritonitis, ...	1	—	—	—	—	—	—	1
	57	4	—	2	5	4	1	73

\* After examination by V.S., this carcass was removed direct to knackery.

*Blantyre.*—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcasses condemned wholly or partially. Carcasses in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcasses.		Organs only.	Carcasses.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, ...	1,655	47	251	348	6	1	230
Heifers, ...	425	3	12	57	2	—	37
Bulls, ...	15	—	1	1	—	—	1
Bullocks, ...	354	2	5	8	—	—	25
Calves, ...	690	—	—	—	—	—	—
Sheep, ...	2,679	—	—	—	3	—	408
Swine, ...	517	—	—	21	—	—	—
Total, ...	6,335	52	269	435	11	1	701

*Blantyre.*—TABLE III.—OTHER DISEASES FOR WHICH ANIMALS WERE TOTALLY OR PARTIALLY CONDEMNED.

Disease.	Cows.	Heifers.	Bulls.	Bullocks.	Calves.	Sheep.	Swine.	Total.
Distomatosis, ...	—	—	—	—	—	1	—	1
Emaciation, ...	—	1	—	—	—	—	—	1
Pericarditis, ...	1	—	—	—	—	—	—	1
Peritonitis, ...	2	—	—	—	—	—	—	2
Pneumonia, ...	1	—	—	—	—	—	—	1
Poorness of Condition,	1	—	—	—	—	—	—	1
Septicaemia, ...	2	—	—	—	—	1	—	3
Septic Pleuritis, ...	—	1	—	—	—	1	—	2
	7	2	—	—	—	3	—	12

*Carlisle.*—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcasses condemned wholly or partially. Carcasses in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, ...	97	49	4	21	1	—	—
Heifers, ...	237	5	1	5	—	—	—
Bulls, ...	15	—	—	1	—	—	—
Bullocks, ...	365	1	—	6	—	—	10
Calves, ...	2,200	1	—	—	4	—	—
Sheep, ...	663	—	—	—	2	—	—
Swine, ...	2,663	1	—	6	—	—	2
Total, ...	6,240	57	5	39	7	—	12

*Carlisle.*—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

Disease.	Cows.	Heifers.	Bulls.	Bullocks.	Calves.	Sheep.	Swine.	Total.
Injury, ...	—	—	—	—	2	—	—	2
Gastro Enteritis, ...	—	—	—	—	2	—	—	2
Septic Metritis, ...	1	—	—	—	—	2	—	3
	1	—	—	—	4	2	—	7

*Douglas.*—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, ...	—	—	—	—	—	—	—
Heifers, ...	—	—	—	—	—	—	—
Bulls, ...	—	—	—	—	—	—	—
Bullocks, ...	120	—	1	—	—	—	—
Calves, ...	—	—	—	—	—	—	—
Sheep, ...	212	—	—	—	—	—	—
Swine, ...	31	—	—	—	—	—	—
Total, ...	363	—	1	—	—	—	—

*Forth.*—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, ...	—	—	—	—	—	—	—
Heifers, ...	103	2	—	24	—	—	1
Bulls, ...	—	—	—	—	—	—	—
Bullocks, ...	165	—	—	9	—	—	4
Calves, ...	—	—	—	—	—	—	—
Sheep, ...	172	—	—	—	—	—	—
Swine, ...	122	—	—	2	—	—	—
Total, ...	562	2	—	35	—	—	5

*Larkhall.*—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, ...	1,135	59	189	602	9	3	94
Heifers, ...	180	2	6	18	—	—	3
Bulls, ...	14	—	—	9	—	4	4
Bullocks, ...	179	—	1	7	—	—	16
Calves, ...	57	2	—	—	2	3	1
Sheep, ...	275	—	—	—	3	1	9
Swine, ...	56	—	1	5	—	—	4
Total, ...	1,896	63	197	641	14	11	131

*Larkhall.*—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

Disease.	Cows.	Bulls.	Calves.	Sheep.	Total.
Emaciation, ...	—	—	—	1	1
Gastro Enteritis, ...	—	—	1	—	1
Injury, ...	2	4	3	—	9
Navel Ill, ...	—	—	1	—	1
Pericarditis, ...	2	—	—	—	2
Peritonitis, ...	—	—	—	1	1
Pneumonia, ...	1	—	—	2	3
Septicaemia, ...	2	—	—	—	2
Septic Metritis, ...	5	—	—	—	5
	12	4	5	4	25

*Lesmahagow.*—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
Class.	Number.	Carcases.		Organs only.	Carcases.		Organs only.
		Wholly.	Partially.		Wholly.	Partially.	
Cows, ...	174	2	2	34	1	—	15
Heifers, ...	34	1	—	5	—	—	1
Bulls, ...	23	—	—	—	—	—	1
Bullocks, ...	362	1	3	14	—	—	7
Calves, ...	3	—	—	—	—	—	—
Sheep, ...	622	—	—	—	—	—	—
Swine, ...	214	1	—	—	—	—	3
Total, ...	1,432	5	5	53	1	—	27

One cow was totally condemned on account of general inflammation.

*Strathaven.*—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
Class.	Number.	Carcases.		Organs only.	Carcases.		Organs only.
		Wholly.	Partially.		Wholly.	Partially.	
Cows, ...	434	23	31	140	7	2	68
Heifers, ...	566	3	2	64	—	—	6
Bulls, ...	20	—	—	1	1	1	—
Bullocks, ...	121	—	1	2	—	—	—
Calves, ...	270	1	—	—	1	—	—
Sheep, ...	1,264	—	—	—	1	—	11
Swine, ...	831	—	5	57	—	1	—
Total,	3,506	27	39	264	10	4	85



*Strathaven.*—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

Disease.	Cows.	Heifers.	Bulls.	Calves.	Sheep.	Swine.	Total.
Dropsy, ...	2	—	—	—	—	—	2
Emaciation, ...	1	—	—	—	1	—	2
Injury, ...	2	—	2	—	—	1	5
Foreign Body, ...	1	—	—	—	—	—	1
Pneumonia, ...	1	—	—	—	—	—	1
Pyæmia, ...	—	—	—	1	—	—	1
Septic Metritis,	2	—	—	—	—	—	2
	9	—	2	1	1	1	14

*Shotts.*—TABLE II.—ANIMALS\* SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, ...	574	37	56	172	—	—	86
Heifers, ...	22 °	1	3	—	—	—	—
Bulls, ...	3	—	—	—	—	—	—
Bullocks,	384	1	1	6	—	—	25
Calves, ...	10	—	—	—	—	—	—
Sheep, ...	394	—	—	—	—	—	—
Swine, ...	13	1	—	—	—	—	—
Total, ...	1,400	40	60	178	—	—	111

*Stonehouse.*—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, ...	133	2	5	91	1	—	59
Heifers, ...	109	—	1	—	—	1	6
Bulls, ...	13	—	—	—	—	—	—
Bullocks, ...	52	—	—	—	—	—	4
Calves, ...	14	—	—	—	—	—	—
Sheep, ...	348	—	—	—	—	—	—
Swine, ...	59	—	—	—	1	—	—
Total, ...	728	2	6	91	2	1	69

*Stonehouse.*—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

Disease.	Cows.	Heifers.	Calves.	Swine.	Total.
Injury, ... ..	1	1	—	—	2
Septicaemia, ... ..	—	—	—	1	1
	1	1	—	1	3

## Private Slaughterhouses.

TABLE II.

District.				Animals Slaughtered.			
				Cattle.	Calves.	Sheep.	Swine.
Greengairs, ... ..	...	...	...	108	—	177	21
Longriggend, ... ..	...	...	...	113	7	115	49
Chapelhall, ... ..	...	...	...	91	2	95	52
Glengowan, ... ..	...	...	...	90	2	86	2
Newarthill, ... ..	...	...	...	18	—	4	—
Cleland, ... ..	...	...	...	181	—	—	—
Harthill, ... ..	...	...	...	310	1	359	26
Abington, ... ..	...	...	...	60	—	150	35
Carnwath, ... ..	...	...	...	104	—	312	80
Crawford, ... ..	...	...	...	50	—	154	10
Ponfeigh, ... ..	...	...	...	61	—	127	14
Carstairs Estate Home Farm, ...	...	...	...	—	—	120	—
Hareshawhead, ... ..	...	...	...	—	—	120	—
Symington, ... ..	...	...	...	—	—	83,450	—
Total, ... ..	...	...	...	1,186	12	85,269	289

TABLE III.—ANIMALS CONDEMNED—WHOLLY OR PARTIALLY.

Animals Slaughtered.	Tuberculosis.			Other Diseases.		
	Wholly.	Partially.	Organs.	Wholly.	Partially.	Organs.
Cows, ...	1	12	58	2	—	10
Heifers, ...	—	7	6	—	—	—
Bulls, ...	—	—	2	—	—	2
Bullocks, ...	1	—	2	—	—	17
Calves, ...	—	—	1	—	—	—
Sheep, ...	—	—	—	—	1	6
Swine, ...	—	—	2	—	—	—
Total, ...	2	19	71	2	1	35

TABLE IV.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

Disease.	Cows.	Bulls.	Calves.	Sheep.	Total.
Injury, ... ..	—	—	—	1	1
Septicaemia, ... ..	1	—	—	—	1
Septic Peritonitis, ... ..	1	—	—	—	1
	2	—	—	1	3

TABLE IV.—RETURN OF DISEASES FOR WHICH ORGANS WERE CONDEMNED.  
DISEASES.

Organs Condemned.	Tuberculo- sis.	Abscess.	Actinomyco- sis.	Pericarditis.	Pleurisy.	Pneumonia.	Cirrhosis.	Diatomato- sis.	Mammitis.	Neoplasms.	Bacterial Necrosis.	Angiomato- sis.	Fatty Infiltration.	Fatty Degeneration.	Metritis.	John's Disease.	Nephritis.	Necrosis.	Echino- coccos.	Cerebrals.	Cysticercus.	Ten- nucoli.	Total.
Heads, ...	1,463	6	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,497
Tongues, ...	88	—	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	118
Lungs, ...	3,766	2	2	—	3	10	—	—	—	—	—	—	—	—	—	—	—	—	21	—	2	—	3,806
Hearts, ...	105	1	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	112
Livers, ...	643	391	—	—	—	—	576	2,131	—	—	22	50	2	2	—	—	—	—	20	—	80	—	3,917
Stomachs, ...	104	924	5	—	—	—	—	9	—	—	—	—	—	—	—	39	—	—	—	—	—	—	1,081
Bowels, ...	1,109	27	—	—	—	—	—	—	—	—	—	—	—	—	—	58	—	—	—	—	—	—	1,194
Kidneys, ...	12	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	—	—	—	—	—	20
Udders, ...	103	10	2	—	—	—	—	14	866	2	—	—	—	—	—	—	—	—	—	—	—	—	997
Uteri, ...	7	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	9
Feet, ...	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6
Prem. Calves, ...	76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	76
Total, ...	7,482	1,363	67	6	3	10	576	2,154	866	2	22	50	2	2	1	97	7	—	41	—	82	—	12,833

Note.—This Table does not include the Viscera of Carcases wholly or partially condemned.

### Burghs of Lanark and Biggar.

Below are tables showing in detail the class and number of animals slaughtered and the amount of disease detected at the above places. It has been arranged to carry on the work of meat inspection at these places in conjunction with the County staff by the appointment of the officials who carried out the work for these

burghs previous to the County taking over the responsibility. It might be said that, meantime, nothing has been changed there, except that the returns are directed to the County Public Health Department, Hamilton. They are given here, and show in detail the exact position at these places. The returns from Biggar, however, are not satisfactory. This matter is having the attention of the Medical Officer.

Generally speaking, my opinion is that the arrangements under the Local Government Act, so far as slaughterhouses are concerned in these small burghs, where administration is in the hands of the burgh authority, and meat inspection in the hands of the county authority, make it difficult to organise and carry out the work satisfactorily.

## LANARK—

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, ...	2	2	—	—	—	—	—
Heifers, ...	5	—	—	—	—	—	—
Bulls, ...	—	—	—	—	—	—	—
Bullocks,	1,167	—	—	—	1	—	5
Calves, ...	28	—	—	—	3	—	—
Sheep, ...	2,089	—	—	—	8	—	2
Swine, ...	434	3	—	—	—	—	—
Total,	3,725	5	—	—	12	—	7

ORGANS CONDEMNED.	DISEASES.									
	Tuberculosis.	Abscess.	Pleurisy.	Pneumonia.	Cirrhosis.	Distomatosis.	Cystic.	Nephritis.	Hepatitis.	Cysts.
										Cysticercus Tenulicols.
										Total.
Heads, ...	2	—	—	—	—	—	—	—	—	2
Lungs, ...	8	—	1	—	—	—	—	—	—	9
Hearts, ...	1	—	—	—	—	—	—	—	—	1
Livers, ...	2	11	—	—	12	5	—	—	—	31
Stomachs,	—	—	—	—	—	—	—	—	1	18
Bowels, ...	—	—	—	—	—	—	2	—	18	3
Kidneys,	—	1	—	—	—	—	—	—	1	1
Feet, ...	—	—	—	—	—	—	—	—	—	—
	13	12	1	—	12	5	2	—	—	65

## BIGGAR—

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cattle, ...	589	—	—	—	—	—	—
Calves, ...	161	—	—	—	—	—	—
Sheep, ...	61,923	—	—	—	—	—	—
Swine, ...	370	—	—	—	—	—	—
Total, ...	63,043	—	—	—	—	—	—

## GENERAL.

DISEASED UDDERS.—It will be observed that the total number of cows slaughtered was 7,349. Of these, 455 were totally condemned on account of generalised tuberculosis, 160 of which showed evidence of tubercle in the udder. There were 955 cows partially condemned on account of various forms of localised tuberculosis, and of these, 41 had udders affected. In addition to the foregoing, there were 3,160 cows in which the disease was so localised that organs only were condemned, and in 103 of these the udder was affected. Of the total cows slaughtered, 990 cases of indurated udder or other forms of chronic mammitis were found. Many of these cases might be called doubtful tubercle in the absence of microscopic examination.

Of the 2,126 heifers slaughtered, 18 were totally condemned, and 32 partially condemned. In 4 of the cases totally condemned and in 1 case partially condemned, the disease was present in the udder. Congenital cases of tuberculosis are reported to the Veterinary Department, who trace the seller through the market or other information supplied, and thereby find the mother of the calf.

During the year 4 cases were reported, and, as a result of investigations by the Veterinary Department, the mother of the calf was traced in practically all instances. Three of these were dealt with under the Tuberculosis Order, and in each case the animal was found to be in an advanced state of tuberculosis.



In dealing with emergency cases, all animals are prohibited from entering public abattoirs or private slaughterhouses unless accompanied by a veterinary certificate certifying that the animal is not suffering from a contagious disease, as scheduled under the Contagious Diseases (Animals) Act, except in cases of accident or consequent upon calving.

Where slaughtering takes place outside the slaughterhouses (farms, etc.), the requirements of the Meat Regulations (Scotland), 1932, are complied with.

The number of diseased animals found at the different abattoirs varied as usual according to the class or quality of animals slaughtered, *e.g.*, at Bellshill, Blantyre, and to a slight extent at Larkhall, there is a turnover of plain cattle for boning purposes. Disease fluctuates according to the quality of these animals. Quality generally varies in accordance with the purchasing power of the people, and the market price.

The whole system of meat inspection is linked up with the County Bacteriological Laboratory, and when necessary histological and bacteriological work is carried out by the Bacteriologist.

**BUILDINGS.**—The Public Abattoir at Baillieston has been let as a store. An effort has been made to dispose of the buildings, but at the end of the year nothing definite had been accomplished.

Throughout the County there are still ten Public Slaughterhouses in constant use, and these are sufficient to meet the requirements of their respective districts. Repairs and painter work, etc., have received the attention of the appropriate Committee, and all requirements were attended to by the Works Department. The properties and equipment are consequently now in good order, but at a very considerable cost. When one considers the period of life of these slaughterhouses, it is reasonable to expect increased expenditure for a time in repairs, so as to keep the premises in a proper state of repair. It is of interest to note that the repayment of capital expenditure on all the slaughterhouses has now been completed. Although the cost of repairs is considerable, it must be admitted that the valuation of the property is considerable.

**PRIVATE SLAUGHTERHOUSES.**—Twelve licences were granted for slaughter of cattle, sheep, and pigs, and three licences for the

slaughter of sheep only, two of these being for the English markets and one for a private institution. The private slaughterhouses have been visited regularly, and the requirements of the new Meat Regulations complied with.

Vans from adjacent counties and burghs continue to hawk the districts, and these have been inspected regularly with satisfactory results. The regular inspections, both with regard to the local butchers and hawking vans inaugurated under the new Meat Regulations, have positively improved the quality of the meat in these districts. Neighbouring counties, who previously gave little attention to private slaughterhouses, are now evidently giving serious attention to the question of detailed meat inspection.

These inspections were carried out in conjunction with the usual supervision of the public abattoirs and private slaughterhouses, including the inspection of shops, cold stores, etc. The butchers owning the private slaughterhouses in the former Middle Ward district still continue to contribute towards the expense of making the necessary inspections at their premises, and the amount paid to the Local Authority this year was £107 9s. 5d., as compared with £95 14s. 9d. for the previous year. This sum was more than sufficient to cover the expense of inspection in this branch of the work.

There is no contribution from the former Upper Ward area. The private slaughterhouses there are not tied to certain days for slaughter, but the onus is put upon them to report to the Meat Inspector when slaughtering takes place, and, in addition, weekly visits are made. Adjustments in the meat inspection arrangements in the Upper Ward area are having the attention of C.M.I. and M.O.H.

A necessary standard of protection, however, with regard to unsound meat in the private slaughterhouse areas has been maintained, and consequently a complete system of inspection exists throughout the whole County.

By-laws for public and private abattoirs throughout the County would be helpful if issued, but no by-laws suitable to present circumstances have yet been adopted, although they have been prepared and under consideration many years ago.

The visits to private slaughterhouses and other places, outside abattoirs, were as follows :—

Private Slaughterhouses,	...	...	1,217
Butchers' shops, vans, stores, etc.,	...	...	4,130

In addition to the above, there are the observations by the Superintendent in each district, which in the past have not been recorded as visits.

**PUBLIC HEALTH (MEAT INSPECTION) REGULATIONS (SCOTLAND), 1932, ARTICLE 15.**—Two permits for meat stores were dealt with during the year. There are now twelve such stores in the County, and these have been periodically inspected, with satisfactory results.

**COLD STORES.**—In the previous Middle Ward area there are 99 cold stores, the cooling arrangements of which are :—ice, 86 ; mechanical, 13. In other parts of the County the registration has not yet been arranged, but the necessary attention has been given to all under Section 43 of the Public Health (Scotland) Act, 1897, and the new Meat Regulations, with satisfactory results.

During the year a large number of inspections were made to cold stores, and, generally speaking, their contents were found sound and the apartments kept in a satisfactory condition.

**UN SOUND MEAT.**—At abattoirs and private slaughterhouses all condemnations have been carried out with owner's consent. The total weight of meat condemned outside the abattoirs (including private slaughterhouses, fleshers' shops, and at farms where special permits for slaughtering were authorised), amounted to 5,063 lbs.

All condemned meat and residue from the offal business—which is in the hands of the Local Authority—throughout the district, continues to be treated in the digester at Bellshill, producing two products, viz., technical tallow and residue for manure. A quantity of the condemned meat and organs is sold to a knackery in the district, as also is the residue from the Bellshill digester.

Periodic visits were made to the County Hospitals and Special Schools, advice given regarding the butchermeat supplies, and

reports made on inspections. Generally speaking, supplies were found satisfactory, so far as the soundness of the meat was concerned, but the quality was in keeping with the price paid.

### **Humane Slaughtering of Animals.**

The various methods of humane slaughtering have received careful consideration from time to time, not only by the officials, but also by the County Council. The mechanical instruments have been adopted in all the slaughterhouses in the County since the beginning of the Slaughter of Animals Act. Up till the present, the Schermer bolt instrument has been in use for larger animals, and the Cash captive bolt pistol for smaller animals, particularly pigs and sheep.

The electric stunner has been in use for some time at Carluke Abattoir, and for the slaughter of pigs it has proved to be superior in efficiency to any other method yet experienced. It gives perfect satisfaction to the ham curer, the pork being perfectly bled and free from shot marks (capillary extravasation), as found in cases where the mechanical bolt pistol is used. It should be noted that in addition to Carluke Abattoir, Bellshill, Blantyre, Larkhall, Strathaven and Douglas Abattoirs have been supplied with electricity.

## FOOD AND DRUGS.

*Senior Inspector and Sampling Officer*—CHAS. MACARA.

The work under the Food and Drugs (Adulteration) Act and relative Orders was carried out by three Inspectors. The following table shows the yearly average number of inspections; administrative samples procured and analysed, with the percentage found deficient; and the samples taken for special purposes for the seven quinquennial periods from 1900-1934; and the annual figures for the years 1935, 1936 and 1937 :—

Administrative Samples.					
Years.	Inspections.	Procured.	Analysed.	Percentage Deficient.	Special Samples.
1900-04, ...	616	338	316	11·27	—
1905-09, ...	828	487	480	12·64	—
1910-14, ...	789	574	558	12·16	573
1915-19, ...	373	340	326	12·96	14
1920-24, ...	804	653	647	8·11	107
1925-29, ...	1,976	1,623	1,608	9·76	1,006
1930-34, ...	2,782	2,513	2,501	7·52	248
1935, ...	2,797	2,443	2,439	3·5	32
1936, ...	2,101	2,119	2,115	5·1	—
1937, ...	2,846	2,409	2,382	10·5	17

The following tabular statement shows the work carried out in the County Area and the Burghs of Biggar and Lanark, and the manner in which the samples were procured, etc. :—

District.	Inspections made.	Samples procured.*				Analysed.	
		Formal.	Informal.	Received Privately.	Total.	Public Analyst.	Chemical Laboratory.
County Area, ...	2,744	111	2,204	12	2,327	90	2,213
Burgh of Biggar,	21	—	14	—	14	—	14
Burgh of Lanark,	81	10	58	—	68	7	58
Total, ...	2,846	121	2,276	12	2,409	97	2,285

27 samples were not analysed.

The following table shows the nature and number of samples purchased and received, the number analysed, and the number found deficient :—

Article.	Procured.	Analysed.	Deficient or Adulterated.
Sweet Milk, ... ..	1,546	1,522	151
Cream, ... ..	8	8	—
Skimmed Milk, ... ..	1	1	—
Butter Milk, ... ..	2	1	—
Condensed Milk, ... ..	8	8	—
Butter, ... ..	27	27	—
Cheese, ... ..	6	6	—
Margarine, ... ..	7	7	—
Dripping, ... ..	9	9	—
Whisky, ... ..	49	49	6
Fruit Cordials, ... ..	4	4	—
Mince, ... ..	401	401	47
Sausage Meat, ... ..	65	65	9
Sausage, ... ..	189	187	33
Meats and Meat Products,	5	5	—
Vinegar, ... ..	2	2	—
Sugar, ... ..	2	2	—
Coffee, ... ..	1	1	—
Rice, ... ..	5	5	—
Flour and Self Raising, ...	4	4	—
Baking Powder, ... ..	1	1	—
Liquid Eggs, ... ..	1	1	—
Cream Pastry, ... ..	1	1	—
Apples, ... ..	1	1	—
Dried Fruits, ... ..	5	5	—
Jams and Marmalade, ...	11	11	—
Honey, ... ..	3	3	—
Syrup, ... ..	2	2	—
Lemon Curd, ... ..	1	1	—
Vanilla Flavouring, ...	1	1	—
Essence of Rennet, ...	1	1	—
Drugs, ... ..	40	40	4
	2,409	2,382	250



Twenty-four of the deficient samples were taken formally and 226 informally. With regard to the formal non-genuine samples, informations were lodged with the County Clerk. The vendors from whom the informal samples were procured were kept under observation, and formal samples taken.

The following table shows the formal non-genuine samples dealt with during the year, and the action taken in each case :—

Registered Number.	Article.	Date Purchased.	Action Taken.
130, 131 and 132	Sweet Milk.	26th Nov., 1936.	Pled guilty at Lanark Sheriff Court, 26th January, 1937. Fined £5.
145	Sweet Milk.	22nd Dec., 1936.	Written caution by County Clerk.
146	Sausage Meat.	23rd Dec., 1936.	Pled guilty at Hamilton Sheriff Court, 5th February, 1937. Fined £3.
7	Tuberculin Tested Milk.	13th Jan., 1937.	Pled guilty at Hamilton Sheriff Court, 2nd March, 1937. Fined £4.
10	Sweet Milk.	1st Feb., 1937.	Pled guilty at Hamilton Sheriff Court, 19th March, 1937. Fined £5.
15	Sweet Milk.	26th Feb., 1937.	Written caution by County Clerk, 12/3/37.
19	Mince.	9th March, 1937.	Pled guilty at Hamilton Sheriff Court, 22nd April, 1937. Fined 15s.
20	Sweet Milk.	12th March, 1937.	Pled guilty at Hamilton Sheriff Court, 26th May, 1937. Fined £2.
26	Mince.	9th April, 1937.	Pled guilty at Airdrie Sheriff Court, 28th May, 1937. Fined £7.
29 and 30	Mince	29th April, 1937.	Pled guilty at Airdrie Sheriff Court, 15th June, 1937. Fined £2.

Registered Number.	Article.	Date Purchased.	Action Taken.
57 and 58	Sweet Milk.	29th June, 1937.	Pled not guilty. After proof at Airdrie Sheriff Court on 30th August, 1937, found guilty. Fined £2.
61	Mince.	9th July, 1937.	Pled guilty at Hamilton Sheriff Court, 13th August, 1937. Fined £3.
66 and 67	Sausage Meat.	30th July, 1937.	Pled guilty at Lanark Sheriff Court, 14th September, 1937. Fined £3.
69	Slicing Sausage.	17th Aug., 1937.	Pled guilty at Hamilton Sheriff Court, 1st October, 1937. Fined £3.
71	Slicing Sausage.	19th Aug., 1937.	Pled guilty at Hamilton Sheriff Court, 1st October, 1937. Fined £5.
75	Slicing Sausage.	23rd Aug., 1937.	Pled guilty at Hamilton Sheriff Court, 1st October, 1937. Fined £2.
77	Whisky.	26th Aug., 1937.	Written caution by County Clerk.
79	Sweet Milk.	30th Aug., 1937.	Pled guilty at Hamilton Sheriff Court, 6th October, 1937. Fined £3.
92	Slicing Sausage.	5th Oct., 1937.	Pled guilty at Hamilton Sheriff Court, 10th November, 1937. Fined £1 10s.
101	Mince.	28th Oct., 1937.	Pled guilty at Airdrie Sheriff Court, 3rd December, 1937. Fined £2.
109	Sweet Milk.	12th Nov., 1937.	Written caution by County Clerk.
113	Slicing Sausage.	18th Nov., 1937.	Proceedings pending.
122	Slicing Sausage.	3rd Dec., 1937.	Proceedings pending.
126	Slicing Sausage.	17th Dec., 1937.	Proceedings pending.

The following tables show the samples of sweet milk analysed during the year, classified according to the percentage of milk fat and of milk solids other than milk fat which they contained, and according to the nature of the business carried on by the vendors, viz., producer-wholesalers, producer-retailers, and retailers :—

SAMPLES CLASSIFIED ACCORDING TO PERCENTAGE OF MILK FAT.  
PRESUMPTIVE STANDARD=3 PER CENT.

Milk Fat Percentage.	NUMBER OF SAMPLES.			
	Producer- Wholesalers.	Producer- Retailers.	Retailers.	Total.
2.0	—	1	—	1
2.2	—	1	—	1
2.3	—	2	1	3
2.5	—	—	4	4
2.6	—	—	1	1
2.7	—	3	1	4
2.8	1	3	2	6
2.9	—	6	3	9
3.0	4	16	4	24
3.1	4	11	8	23
3.2	8	11	20	39
3.3	20	24	27	71
3.4	35	45	35	115
3.5	59	35	34	128
3.6	84	35	56	175
3.7	86	49	50	185
3.8	79	44	51	174
3.9	95	41	45	181
4.0	58	26	19	103
4.1	37	19	24	80
4.2	21	22	19	62
4.3	22	7	14	43
4.4	9	8	9	26
4.5				
and over	23	27	14	64
Total,	645	436	441	1,522

SAMPLES CLASSIFIED ACCORDING TO PERCENTAGE OF MILK SOLIDS  
OTHER THAN MILK FAT.

PRESUMPTIVE STANDARD=8.5 PER CENT.

Non-fatty Solids Percentage.	NUMBER OF SAMPLES.			
	Producer- Wholesalers.	Producer- Retailers.	Retailers.	Total.
7.3	—	—	1	1
7.4	—	—	1	1
7.5	1	1	—	2
7.6	—	1	—	1
7.7	3	—	—	3
7.8	2	—	—	2
7.9	1	—	1	2
8.0	4	2	2	8
8.1	6	2	—	8
8.2	8	3	6	17
8.3	9	8	11	28
8.4	25	16	12	53
8.5	62	30	29	121
8.6	77	53	34	164
8.7	106	62	56	224
8.8	112	77	90	279
8.9	100	69	70	239
9.0	80	57	74	211
9.1	30	29	38	97
9.2	10	17	14	41
9.3	4	5	1	10
9.4	2	—	—	2
9.5 and over	3	3	1	7
Total,	645	435	441	*1,521

\* One sample analysed for milk fat only.

*Sweet Milk.*—1,546 formal and informal samples were procured, of which 1,522 were analysed and 151 found deficient or adulterated. The procedure adopted is to procure informal samples for analysis in the Chemical Laboratory, and any samples found not genuine

are followed up by taking formal samples from the vendors concerned. On formal samples being taken, it is the practice to procure informal samples simultaneously from the same vessel. These informal samples are analysed in the Chemical Laboratory and the results of analysis known on the same day. When samples are deficient, this early information is valuable for the purpose of further investigation. If the vendor is a retailer, samples are taken in course of delivery to him, and, if the vendor is a producer-retailer, an "appeal to the cows" is made, with the consent of the producer, at the milkings immediately following.

This "appeal to the cows" was made in a case where a sample taken on delivery from a farmer to a dealer was found to be 6 per cent. deficient in solids not fat and certified by the Public Analyst as a result of the Freezing Point (Hortvet) test to be due to added water. There were 17 cows in the herd and samples were taken of each cow's milk at the morning milking as well as a sample from the milk in bulk. Samples were also taken from two cans of evening milk standing in the milkhouse ready for delivery to the wholesaler with the morning milk. From the analyses of the above samples it was found that two cows were yielding milk low in milk fat, namely 2.6 per cent and 2.8 per cent., and three of the cows yielding milk low in milk solids other than milk fat, namely, 8.1 per cent., 8.4 per cent. and 8.2 per cent. The analyses of the samples taken from the delivery cans showed that the morning milk contained 3.4 per cent. of milk fat and 8.7 per cent. of solids other than milk fat, and the evening milk contained 3.6 per cent. of milk fat and 7.8 per cent. of solids not fat. These figures suggest that the evening milk had been adulterated by the addition of water. A sample of the morning milk was submitted to the Public Analyst who certified the milk to be genuine and observed it contained no added water, as the freezing point (Hortvet) figure is within the range of that given by genuine milk as it comes from the cow. The Hortvet test has been found to be of great value in milk prosecutions. In connection with one of the milk prosecutions where the sample was certified to be deficient in milk solids other than milk fat to the extent of 3 per cent. or thereby, the Hortvet test figure was  $-0.469^{\circ}\text{C}$ . An "appeal to the cow" sample was taken at the evening milking on the same day on which the sample was taken. This sample was found on analysis to be genuine and the Freezing Point (Hortvet) figure  $-0.531^{\circ}\text{C}$ . Along with his analysis the Public Analyst, Mr. R. M. Clark, sent a letter explaining the position as regards the Hortvet

test and it may be of interest to record this letter, which is as follows :—

*" Sweet Milks.*

*" Nos. 10 and 270.*

" I now enclose results of my analysis of sample No. 270 (Informal), which, I understand, was an 'Appeal to the Cow' sample of the evening milk taken at the premises of the supplier of No. 10 sample of sweet milk which I reported as being deficient in milk solids other than milk fat to the extent of 3 per cent. or thereby. The Freezing Point (Hortvet) figure ( $-0.469^{\circ}\text{C}.$ ), however, of No. 10 sample indicated that the sample contained 10 per cent. of added water (based on the minimum figure of  $-0.530^{\circ}\text{C}.$  for genuine milk), so that the original milk before its admixture with this 10 per cent. of water must have had the following composition, viz. :—

	Per Cent.	
	Original Milk.	No. 10 sample after admixture with water.
Milk fat, ... ..	3.91	3.52
Milk solids other than milk fat, ...	9.14	8.23
Total milk solids, ... ..	13.05	11.75
Freezing Point (Hortvet), ...	<u><math>-0.530^{\circ}\text{C}.</math></u>	<u><math>-0.469^{\circ}\text{C}.</math></u>

*" Appeal to the Cow " sample No. 270 (Informal).*

	Per Cent.
Milk fat, ... ..	4.92
Milk solids other than milk fat, ...	9.03
Total milk solids, ... ..	13.95
Freezing Point (Hortvet), ...	<u><math>-0.531^{\circ}\text{C}.</math></u>

" The 'Appeal to the Cow' sample, as you will observe, is high in milk fat and milk solids other than milk fat, while its Freezing Point (Hortvet) is quite normal ( $-0.531^{\circ}\text{C}.$ ), so that it is genuine and contains no added water. Further, it will be seen that although the proportion of fat is somewhat higher the milk solids other than milk fat are practically the same as what sample No. 10 must have contained before the water was added.

" It is now clear from the above results that rich milks of this type can contain considerable proportions of added water without



bringing the figures of the mixture below the presumptive standards for milk fat or milk solids other than milk fat, and that the Freezing Point test is invaluable for detecting added water whether the milk solids other than milk fat is below or above the presumptive standard. As you are aware, genuine milk has a Freezing Point (Hortvet) figure which varies between  $-0.530^{\circ}\text{C.}$  and  $-0.560^{\circ}\text{C.}$ , and any milk showing a Freezing Point nearer zero than  $-0.530^{\circ}\text{C.}$  contains added water.

"In this connection it may interest you to know that the composition of the samples of milk submitted to me by other authorities about the same time—during the last fortnight of January—showed similar high proportions of milk solids other than milk fat.

"The results were as follows:—

					Per Cent.	
					Milk Fat.	Solids other than Milk Fat.
Lowest,	...	...	...	...	3.10	8.67
Highest,	...	...	...	...	3.50	9.11
Average,	...	...	...	...	3.71	8.89

"I hope I have made the position clear."

*Cream.*—Eight samples of cream were procured. Seven of these were sterilised tins of thick cream as sold by grocers, and one was double cream sold from bulk by a Dairy Co. The amount of fat in the sterilised tins of thick cream ranged from 20.9 per cent. to 25.8 per cent., and double cream was 50.40 per cent.

*Skimmed Milk.*—The amount of skimmed milk on sale is now very small. This is doubtless due to the control exercised by the Milk Marketing Board. Only one sample was procured from a large dairyman who buys in skimmed milk from a creamery. The analysis showed that it contained .7 per cent. of fat and 9.2 per cent. of solids not fat.

*Buttermilk.*—Two samples of buttermilk were procured on complaint of the excessive amount of water present. One of the samples was analysed, and in the absence of a standard for buttermilk was certified as genuine. It contained 7.8 per cent. of total solids.

*Butter.*—Twenty-seven samples were taken and analysed and all found to be genuine. At the routine inspection of shops, attention was given to the detection of the fraudulent practice of selling margarine for butter. Numerous samples were procured by means of agents, but in no case was the practice detected. The Merchandise Marks (Imported Goods) Order, 1932, was also kept in view, and where butter was exposed for sale in bulk or in made-up packets without a label giving an indication of the country of origin, verbal cautions were given. A few verbal complaints were received during the year that a cheaper foreign butter was being sold as “Danish Butter.” These were all carefully investigated, but in no case was there proof that they were well founded.

*Whisky.*—Forty-nine samples were taken, 15 formal and 34 informal. One formal and five informal samples were certified as under the Statutory Strength. In practice, the procedure is to take informal samples for analysis in the Chemical Laboratory, and follow up any found to be deficient in strength by taking formal samples.

#### MARGARINE CONTRAVENTIONS.

Seven margarine samples were purchased and analysed. Three of them were sold in wrappers describing them as “mixed with choicest butter.” Analysis showed that they contained 5·8 per cent. of butter fat. A letter giving the facts of the samples sold with the above description was sent to the County Clerk with a view to his guidance as to whether legal proceedings should be instituted, in view of the somewhat conflicting decisions of the Court of Session on the matter.

#### MILK (SPECIAL DESIGNATIONS) ORDER (SCOTLAND), 1930-37.

The Milk (Special Designations) (Amendment) Order, 1937, came into operation in March, and fixed 60°F. as the minimum temperature for T.T. Milk.

Four hundred and seventy-two inspections were made and 513 samples of graded and attested milk were procured (including samples taken in connection with the granting of licences). Of the samples procured, 432 were taken in duplicate for bacteriological and chemical examinations, 40 for bacteriological examination only and 41 for chemical examination only.

Seventy-four samples of "Pasteurised" Milk (34 sold as ordinary milk), were subjected to the "Phosphatase Test" in the Chemical Laboratory. This test indicates whether the pasteurising process has been satisfactory. The test showed unsatisfactory results in 9 cases, and the authorities having supervision over the pasteurising plants concerned were communicated with. Further sampling showed that the matter had been remedied.

#### EXAMINATION OF ORDINARY MILK FOR THE PRESENCE OF TUBERCLE.

During the year 760 samples were taken from transport lorries and farms and examined in the bacteriological laboratory for the presence of tubercle. Seven hundred and eleven of these were found to be negative and 49, or 6.46 per cent., were positive. The Veterinary Inspector was notified of the results of the positive samples and made investigations at the herds concerned. As a result of these investigations, 52 tubercular animals were dealt with.

#### EXAMINATION BY THE REDUCTASE TEST OF ORDINARY MILK.

From the sources from which samples were taken for tubercle, samples were also taken and submitted to the Reductase Test for cleanliness in the Chemical Laboratory. In cases of unsatisfactory samples the farmer was communicated with and bottles provided for him to send on samples taken by himself. In all, 1,073 were procured, 859 by the Inspector and 214 received privately. Two hundred and seventy-three samples were found to be unsatisfactory as regards cleanliness.

#### CONTROL OF MILK TO SCHOOL CHILDREN.

Under the scheme for supplying school children with milk, 150 samples were procured from the producers on delivery of the supplies to the distributors, as well as check samples purchased from the schools. In the main, the milk comes from producers of T.T. Milk in Ayrshire and the results of any unsatisfactory samples were communicated to the Authority concerned.

#### PUBLIC HEALTH (CONDENSED MILK) AND (DRIED MILK) REGULATIONS (SCOTLAND), 1935.

Eight samples of condensed milk were taken for analysis. These were all found to conform to the terms of the regulations. The labelling requirements of the Regulations were observed in every case.

PUBLIC HEALTH (PRESERVATIVES, ETC., IN FOOD) REGULATIONS  
(SCOTLAND), 1925.

All the articles which are affected by the above Regulations were analysed for the presence of preservative. In procuring samples of mince, sausages, sausage meat, etc., the procedure adopted is to procure informal samples for examination in the Chemical Laboratory, in the first instance, and follow up any non-genuine samples afterwards by the purchase of formal samples for analysis by the Public Analyst. As will be seen from the table of samples purchased and analysed, 47 samples of mince, 9 samples of sausage meat and 33 samples of sausage were found to be not genuine in respect that they contained preservative prohibited by the Regulations. Informations were lodged with the County Clerk in cases which were dealt with formally.

EXAMINATION OF FOODSTUFFS, ETC., AS SUPPLIED TO  
INSTITUTIONS AND SPECIAL SCHOOLS.

Systematic inspections were made during the year at County Institutions and Special Schools and the following samples of food-stuffs, soap, etc., as supplied by the various contractors taken for examination in the Bacteriological and Chemical Laboratories, viz. :—Tuberculin Tested Milk, 30 ; Butter, 3 ; Mince, 4 ; Sausage, 41 ; Sugar, 1 ; Crystallised Sugar, 1 ; Ground Coffee, 1 ; Rice, 1 ; Ground Rice, 4 ; Flour, 2 ; Mixed Peel, 1 ; Vanilla Flavouring, 1 ; XX Pale Soap, 5 ; Soft Soap, 8 ; Soap Powder, 8.

Twelve samples of sausage did not comply with the required standard and the contractors concerned were communicated with.

COAL SUPPLIES TO COUNTY INSTITUTIONS.

Thirty-three inspections were made to Institutions, and 55 samples of coal supplied to them by various contractors taken for examination in the laboratory at Uddingston Gas Works.

MERCHANDISE MARKS ACT, 1926.

The Orders in Council made under the above Act requiring an indication of country of origin by means of marking or labelling on specified imported articles have received attention during the routine visits to shops. The work done has been mainly informative and cautionary. Generally speaking, merchants are doing their

best to meet the provisions of the law. Many contraventions were detected, but these were remedied on attention being drawn to the matter.

### **FERTILISERS AND FEEDING STUFFS ACT, 1926.**

Four inspections were made and 9 samples of fertilisers procured on request by a Farmers' Trading Association. Sampling under the Act is carried out by the Food and Drugs Inspectors.

The samples consisted of sulphate of ammonia, superphosphate, ground mineral phosphate, potassic mineral phosphate, kainit, sulphate of potash, potash salts, general purposes manure, finger and toe mixture. The Agricultural Analyst reported that the composition of the fertilisers agreed with the warranties on the invoices. Copies of the certificates were sent to the buyers.

### **PHARMACY AND POISONS ACT, 1933.**

There were 193 shopkeepers on the Register for 1937 licensed to sell the various poisons under Part II. Seventeen localities were visited and 71 inspections made with a view to the control of the sale of poisons specified in Part II, amongst grocers, ironmongers and other shopkeepers, and to give information as to the steps required for procuring licences. Eight samples of ammonia and 2 of disinfectants were procured for analysis in the Chemical Laboratory. Five samples of ammonia were found to be of a strength less than 5 per cent. which can be sold without the shopkeeper being licensed, while 3 contained ammonia ranging from 5.2 to 5.6 per cent., and the shopkeepers concerned were notified that they would require to apply to the County Clerk for a licence. The samples of disinfectants conformed to the requirements of the Act.

### **SHOPS ACTS, 1912-1934.**

The work under the above Acts has been carried out by the Food and Drugs Inspectors on the same lines as in previous years, with a view to assisting shopkeepers and their assistants to obtain the benefit of better working conditions conferred on them by Statute. Legal proceedings against the offenders are only instituted as a last resort, where cautions have not been effective in putting a stop to infringement of the terms of the Acts. In the main, offenders are generally small shopkeepers and itinerant hawkers.



Table D shows the number of inspections to localities, visits to shops, and contraventions detected under the Act. There were 53 contraventions. These consisted of 3 cases of failure to close at the time fixed on weekly half-holidays and under Closing Orders ; 1 case of failure to give assistants afternoon off weekly ; 17 cases of over-employment of young persons under eighteen years of age ; and 32 failures to exhibit Statutory Notices.

Ninty-nine Statutory Notices were issued to shopkeepers.

The following paragraphs give particulars regarding inspections made in connection with the administration of the Acts and the irregularities detected :—

*Shops' Weekly Half-Holiday.*—The Weekly Half-Holiday Orders operative in the County Area apply to (1) the district covered by the old Middle Ward area ; (2) the Parish of Carluke ; (3) Baillieston and District Butchers' Order ; (4) Lower Ward Butchers' Order ; and (5) Bothwell Parish Butchers' Order. By these Orders, Wednesday is fixed as the day of the weekly half-holiday. In all the other areas of the County the shopkeepers arrange amongst themselves with regard to the day on which they will close their premises in the afternoon, and intimate the day by means of a notice exhibited in their premises. Thirty localities were visited on the day fixed for the weekly half-holiday, and, generally speaking, the closing of shops at 1 p.m. on Wednesday was very well observed. Nineteen contraventions were detected, viz., three cases of failure to close promptly on weekly half-holiday and 16 failures to exhibit the Statutory Notices. Verbal cautions were given.

*Early Closing of Shops in the Evening.*—The following Early Closing Orders are in operation within the County :—(1) General Closing Order for all shops in the Parish of Cambuslang ; (2) Butchers' and Grocers' Early Closing Order in Blantyre ; (3) Butchers' Early Closing Order in Baillieston and District ; (4) Butchers' Early Closing Order in the old Lower Ward area ; (5) Hairdressers' Early Closing Order applicable to the Special Lighting Districts of Aitkenhead and Tannochside, Bellshill and Mossend, Blantyre, Bothwell, Cambuslang and Uddingston ; (6) Bothwell Parish Butchers' Shops Order ; and (7) Blantyre (Boot and Shoemakers, Drapers and Tailors) Closing Order.



Four inspections were made to localities in the evening under Closing Orders and the Acts. It was found that, generally speaking, the closing of shops was carried out punctually.

*Street Trading.*—During the routine inspections on the weekly half-holiday and in the evenings, attention is given to street traders.

*Assistants' Weekly Half-Holiday and Meal Hours.*—At all inspections made, special attention is given to the provisions of the Act with regard to the assistants' half-holiday. One contravention was detected, and the offending employer was cautioned.

*Over-Employment of Young Persons under 18 Years of Age.*—Attention was given to the provisions of the 1934 Act, and 17 contraventions were detected. The employers were interviewed and pleaded ignorance of the requirements of the law. The matter was remedied.

*Communications.*—Many special visits were made as a result of communications received from traders requesting information regarding the provisions of the Acts.

TABLE D.—SHOWING INSPECTIONS, VISITS, TO SHOPS, ETC., AND  
CONTRAVENTIONS IN THE COUNTY IN 1937.

Inspections to localities, ... ..	42
Visits to shops, etc., ... ..	296

CONTRAVENTIONS—

Failure to close; Weekly Half-Holiday and under Closing Orders, ... ..	3
Sale of non-exempted goods, ... ..	—
Street Trading, ... ..	—
Failure to give assistants afternoon off weekly, ...	1
Failure to give assistants proper intervals for meals, ...	—
Employing young persons under 18 years more than 48 hours per week, ... ..	17
Failure to exhibit notices in terms of Act, ...	32
	53

## RIVERS POLLUTION PREVENTION.

SENIOR INSPECTOR,       -       -       FRANK M'ARTHUR.

The inspection work done during the year is summarised in the following table :—

### SOURCES OF POLLUTION—INSPECTIONS AND POLLUTIONS DETECTED.

Nature.	SOURCES LIABLE TO POLLUTE.				POLLUTIONS DETECTED.		
	*Number.	Number Inspected.	Number of Inspections.	†Samples Taken.	Number of Sources.	Number Detected.	
Coal-Dross Washers, ...	49	52	356	179	20	55	
Ammonia, &c., Works, ...	7	4	17	7	—	—	
Paper Mills, ... ..	2	2	19	33	2	4‡	
Print, Dye Works, &c., ...	3	—	—	—	—	—	
Chemical Work, ... ..	1	1	2	—	—	—	
Sewage Works and Outfalls,	—	86	175	23	7	9	
Streams, &c., ... ..	—	180	1,082	618	—	—	
TOTAL, ...	—	325	1,651	860	29	68	

\* At end of year.

† The samples analysed are dealt with in the Report of the work done in the Chemical Laboratory.

‡ Samples containing appreciably over 6 parts per 100,000 of suspended solids.

### Trade Pollutions.

The total mining and manufacturing pollutions detected numbered 59. Of these, 55 were from coal-dross washers, and the remainder from the paper mills on the North Calder Water. No instance of pollution by spent ammoniacal liquor was noted.

COAL-DROSS WASHERS.—There were 49 coal-dross washers on the register at the end of the year. No new washers were added during the year.

356 inspections were made, 179 samples of effluents taken, and 55 pollutions, involving 20 collieries, detected.

Pollution was detected at the following collieries :—

Auchengeich.	Douglas.
Baton.	Earnock.
Benhar.	Holytown.
Blantyre.	Northfield.
Blantyreferme.	Quarter.
Bothwell Castle.	Tannochside.
Broomfield.	Viewpark.
Cornsillock.	West Cameron.
Dalquhandy.	Wester Auchengeich.
Dewshill.	Wilsontown.

The following notes refer to the collieries at which pollution of a more or less serious nature was detected.

*Auchengeich Colliery, near Chryston.*—Pollution, due to silting up of certain ground-surface settling ponds, was twice observed during the year. The systematic cleaning of these ponds was carried out much better than in previous years, but there is still liability to pollution of the Bothlin Burn occurring from time to time.

*Baton Colliery, Shotts.*—Extended reference was made in the report for the preceding year to the question of pollution of the River Almond from this colliery and to the action taken in connection therewith. It was again found necessary to complain of serious pollution. Thus, on 25th August, a ditch headstream of the River Almond was found to be in a grossly polluted condition due to the fact that the bank of the settling area had collapsed, the effluent as flowing in the ditch containing 2848.8 parts per 100,000 of suspended solids. Remedial measures were taken, but, in view of the fact that the colliery had come in for criticism in 1936, and had been the subject of inquiries by the Department of Health, the circumstances were reported to the County Clerk, who communicated with the owners (Shotts Iron Co., Ltd.), warning them that the preventive measures must be adequate and maintained in a satisfactory condition, otherwise a prosecution

would be instituted against them. Thereafter, efforts were made to get the owners to heighten the bank of the settling area, especially as the management were quite decided not to revert to using an existing bing settling pond. A decision to have this done was eventually made, and a contract let for the work, which was expected to be commenced on 25th January, 1938. In the interim, efforts were made by repairing the bank of the settling area and raising it here and there, and also utilising a portion of the area from which silt had been removed for boiler firing some time previously, to prevent pollution as far as possible. In spite of these measures, however, pollution was noted on 7th September, 18th November (at Baton Bridge), and on 27th and 29th November. Further, on 27th December the manager informed the Rivers Inspector that the bank of the inlet channel to the settling area had given way during or after a heavy fall of snow, but on that date the break was found to have been repaired and the washings entering the cleaned portion of the settling area in which a wooden outlet sluice had been placed. At the time of this inspection the washings had not reached the outlet level so that the interception could not have been effected long before then. The systematic heightening all round of the bank of the settling area was commenced early in the current year.

*Blantyreferme Colliery.*—The new scheme of preventive measures referred to in the report for the preceding year proved satisfactory, but there was still found to be a small flow of washings discharging by one of the outfalls to the River Clyde, causing slight pollution. Towards the end of the year many inspections were made at the outfalls and colliery and efforts made with the management to trace the source of this flow, but without success. Endeavour to entirely eliminate pollution will be renewed.

*Cornsillock Colliery, near Larkhall.*—Serious pollution of the Mill Burn occurred on several occasions, due to the silted condition of settling ponds which it is intended should deal with surface drainage and overflow from a "return" pond, and also with the contents of the latter pond should it not be possible for any reason to pump the washings to settling ponds on the debris bing. After considerable pressure on the colliery management, a beginning was made about the end of November with the work of cleaning out these ponds, but very slow progress was made, and the work was not completed until the current year.

*Dewshill Colliery.*—Very serious pollution of the Dewshill Burn, passed on to the Barbauchlaw Burn, was detected on 6th October, due to the coal washings being pumped, not to the settling area proper, but to an old bing settling pond, which was silted to the level of the outlet pipe, the whole volume of washings thus discharging to the burn. On attention being drawn to the circumstances, it was explained that until two days before, the washer had only been intermittently in operation during the previous three months, but no satisfactory explanation could be obtained as to why the bing settling pond referred to was being used. However, the discharge pipe from the pulsometer throwing the washings to this pond was there and then disconnected and pumping to the proper settling area resumed. This settling area was maintained in satisfactory condition during the year, and it is believed that no pollution from it either of the Dewshill Burn in the east or the Shotts Burn on its western side occurred.

*Wester Auchengeich Colliery.*—The following letter, dated 22nd March, with regard to pollution of the Robroyston Burn and Park Burn, was sent to the County Clerk :—

The Rivers Inspector has reported that, on the 5th instant, he found gross pollution of the Robroyston Burn occurring from Wester Auchengeich Colliery (owned by Messrs. James Nimmo & Co., Ltd., 21 Bothwell Street, Glasgow, C.2), and that this was due to the defective condition of the coal-dross washings settling area, in two sections of which the bank had given way. One of the breaks it is understood had occurred on the day of inspection, and the other a day or two previously. At the time of inspection the coal-washings effluent was passing through one of the sections of the settling area thus rendered defective direct to the outfall ditch, and thence to the Robroyston Burn.

Analyses of a series of samples taken on 5th March show the extent of the pollution, the suspended solids in the samples being as follows :—

	Parts per 100,000.
Robroyston Burn above the outfall ditch, ...	Nil.
Effluent as discharging from settling area, ...	18,395·2
Robroyston Burn about 20 yards below the outfall ditch, ... ..	522·4
Robroyston Burn about 200 yards below the outfall ditch, ... ..	398·8
Park Burn (Robroyston Burn headstream) below disused quarry at Boghead, ...	70·8
Park Burn about 30 yards below the junction of the Robroyston Burn headstream at Boghead, ... ..	57·8



In addition, the Robroyston Burn was found to be heavily silted with coaly matter, deposits being also found in the Park Burn. At the time of inspection workmen were engaged building up one of the breaks. On the 6th instant, when the Rivers Inspector had an interview with the Colliery Manager, it was found that the washings had been diverted to certain brick-built "emergency" settling ponds, as a result of which serious pollution was stopped for the time being. At a further inspection, made on the 10th instant, it was found that the washings were again being discharged to one of the previously defective sections of the settling area, the bank of which had been repaired. The effluent as syphoned from this area, although not of large volume, contained 3694.4 parts per 100,000 of suspended solids; the Robroyston Burn, about 20 yards below the junction of the effluent ditch, 128.2; the Park Burn (Robroyston Burn headstream at Boghead), 18.8; and the Park Burn about 20 yards below the Robroyston Burn headstream at Boghead, 14.2 parts per 100,000 of suspended solids. These results, while showing a great improvement as compared with the conditions found on 5th March, cannot be considered as satisfactory.

As cause for serious complaint in conditions similar to those described above has arisen before, I would refer to the County Medical Officer's letter to you of 31st March, 1936, in which it is stated—

\* \* \* \* \*

He (the Rivers Inspector) explains that the measures to prevent pollution consist of two brick-built settling ponds and a large sub-divided settling area, the banks of which are formed of coal-washings silt as excavated in the process of cleaning. It has been found that although a workman is engaged continually cleaning out the sections of this area and attending to the banks, on account of the nature of the material forming the banks they are liable to give way, resulting in serious pollution. This has occurred on several occasions. . . . The Rivers Inspector has suggested to the local management from time to time that so far as the settling area is concerned it would be much more satisfactory if a deep settling pond composed of washer dirt were formed to which the washings could gravitate or be pumped as necessary. This method is adopted at other collieries owned by Messrs. Nimmo with satisfactory results.

\* \* \* \* \*

I have also to refer you to letters sent to you on 27th May and 26th June, 1936, in the latter of which you will note that, apart from the very strong reasons for complaint of intermittent



pollution of the Robroyston Burn where it flows entirely within the area of the County, complaint has been made by Mr. Findlay of East Cawder Farm, and the Dunbartonshire Local Authority, a copy of the County Medical Officer for Dunbartonshire's letter of complaint being sent to you on 2nd July.

You will no doubt agree that such, even intermittently, unsatisfactory conditions cannot be allowed to continue unquestioned, and you will probably once more communicate with Messrs. Nimmo pointing this out, and also indicating that if satisfactory remedial measures are not provided without delay, the Local Authority will have no alternative but to take legal action against them.

On considering this communication the Public Health Committee instructed that the necessary steps towards prosecution of Messrs. Nimmo should be taken. The matter was accordingly laid before the Department of Health, and, on 27th July, one of the Department's Engineers, in company with the Rivers Inspector, visited the colliery and inspected the preventive measures then in operation, which, it was explained, had been altered from about the beginning of May and were believed to constitute an improvement on the methods previously in operation. The alteration consisted in conveying the washings to two small ponds, built of stones and other waste, formed at the base of a new refuse bin, use of the settling area complained of having been discarded. In addition, a method of mechanically recovering more silt from the washings before leaving the washer was being tried, and it was the intention to pump the surplus washings thus freed from as much silt as possible to cavities on the old refuse bin. These arrangements were brought into operation on 5th August, the two small debris ponds above referred to being retained and improved to be used as an alternative to the new arrangements if necessary.

Conveying the results of the inquiry by their Inspector, the Board, in a letter of 9th August to the County Clerk, stated :—

In view of the active steps now being taken by Messrs. James Nimmo & Company to avoid pollution of the stream, the Department do not consider that they would be justified at present in giving their consent to proceedings being taken by the County Council against that Company under Section 6 of the Rivers Pollution Prevention Act, 1876. Should the County Council find that the new method of treating the wash water about to be put into operation does not prevent pollution of the stream it will be open to them to renew their application to the Department for authority to prosecute.

The observations of the County Medical Officer on the Department's communication, made on 13th September to the County Clerk, were as follows :—

I duly received your letter of the 10th ultimo, enclosing copy letter from the Department of Health, conveying the Department's decision in the question of proceedings against Messrs. James Nimmo & Co., Ltd., for polluting the Robroyston Burn. You will no doubt accept the decision of the Department to at present withhold their consent. The remedial measures referred to in the last quoted paragraph of the report of the Department's Inspector were brought into operation on 5th August, and it is believed that since then no pollution has occurred. Observations over a further period will, however, be necessary to ascertain whether they are likely to continue to be satisfactory, and I shall report the result of these observations to you in due course.

Since the date of the above letter frequent inspections have been made, and, on 5th November, silt evidence of pollution was noted in the bed of the Robroyston Burn. The water itself was also unsatisfactory at the time of inspection, and it was ascertained that the washings pump had broken down some days previously, the washings being diverted to brick-built settling ponds situated near the stream. These ponds, besides dealing with surface drainage, are intended to be used in such emergency circumstances, but they were silted up, and it was clear there had been a serious polluting overflow which accounted for the silt deposits observed. However, on the day of inspection, the washings had been again diverted to the old settling area, and have since been disposed of there, thus reverting to the method of disposal in operation prior to the general question of pollution being raised by the letter to the County Clerk of 22nd March before quoted. On the whole, there does not appear to have been ground for very serious complaint since 5th November, careful attention having been given to the settling area, and especially to the syphoning of effluent to the outfall ditch, but, at inspections made on 7th and 15th December, evidence of the bank of the north-west section of the area having given way was observed, as a result of which pollution no doubt occurred. It might also be noted that the method, before referred to, of mechanically recovering silt from the washings before leaving the washer only operated for a short period.

*Wilsontown Colliery.*—The extensive settling area at this colliery was maintained in good order during the year, but the attention of the management was drawn to the fact that it was becoming silted

up, and suggesting that the provision of additional accommodation might be considered. No new ground has been taken in, but banking up of the area was carried on with. Unfortunately, on 15th November, the bank of the eastern section broke, and it was necessary to divert the washings to the western section which was silted up. As a result pollution occurred. The break was at once repaired by an augmented squad of workmen, and thereafter systematic banking up of the area continued.

The other collieries (page 200) at which pollution was detected need not be specially referred to, the necessary remedial measures in almost every instance being readily carried out by the colliery managements concerned.

AMMONIA, &C., WORKS.—The number of inspections made during the year was 17, and 7 effluent samples were taken. No instance of pollution was detected.

The measures taken in the preceding year for the prevention of intermittent pollution of the South Calder Water by spent ammoniacal liquor from Shotts Iron Works continued to prove satisfactory, and there was no recurrence of pollution of the River Mouse from the by-product plant at Wilsontown Ammonia, &c., Works. These sources of pollution are specially referred to in the report for the preceding year (pages 193-199).

MANUFACTORIES.—The number of inspections during the year was 21, and 33 samples were taken. All the inspections, with the exception of 2, were made at Caldercruix and Moffat Paper Mills.

*Caldercruix Paper Mills.*—Of 15 samples of effluent from the settling ponds at these mills, none contained more than 15.0 parts per 100,000 of suspended solids, the average amount being about 7.25, which was very satisfactory. Supernatant liquid from the sludge settling areas as drawn off from time to time in small quantities contained from 2.1 to 101 parts per 100,000 of suspended solids. The culverting of a small stream, in connection with the provision of new sludge settling areas, referred to in the report for the preceding year, has not yet been completed.

*Moffat Paper Mills.*—The quality of the effluent from the settling ponds at these mills was very much improved as compared with the

effluent produced in preceding years, the average amount of suspended solids in 10 of the 11 samples taken being only about 6 parts per 100,000. The other pond effluent sample contained 52·6, while a sample of filtrate from the sludge settling area contained 9·5 parts per 100,000.

### **Solid Matter Pollution.**

No serious offences against Section 2 of the River Pollution Prevention Act, 1876, were brought to notice during the year.

In view of complaints having been received from time to time as to the depositing of tomato and potato haulm in or on the banks of streams whereby the due flow of such streams had been interfered with or fishing or other interests prejudiced, a " Public Caution " was inserted in the *Hamilton Advertiser* at the time of year such an offence was most likely to be committed.

Cautionary notices against depositing debris in streams were also posted up at Culter Village (Culter Water), Carnbroe (North Calder Water), Rosebank (River Clyde), and Strathaven (Powmillon Burn), while, at the same time, at Carnbroe, accumulated debris was removed from the North Calder Water.

### **Sewage Pollution and Sewage Disposal.**

175 inspections of sewage purification works and sewage outfalls were made, and 23 samples taken.

Several minor instances of abnormal conditions at sewage purification works were observed, and the necessary remedial measures taken. Matters of interest in connection with sewage disposal dealt with during the year may be specially referred to.

*Brackenhirst Farm, New Monkland.*—Complaints were received as to alleged serious pollution of the Gartverrie Burn, which is a source of water supply for dairy stock, by a discharge of byre and other drainage from Brackenhirst Farm, owned by Glasgow Corporation. Analysis of the stream water showed that it was polluted to such an extent as to render it unfit for all purposes. Cause for complaint was at once removed on attention being directed to the circumstances by having the farm drainage conveyed on to pasture land, where it is irrigated.

*Burgh of Airdrie.*—The following report, dated 26th May, by the Rivers Inspector with regard to pollution of the North Calder Water from the Burgh Sewage Purification Works, was transmitted to the County Clerk :—

I have to report the occurrence of gross pollution of the North Calder Water by effluents from these works. On Sunday, 16th May, I observed the river at Carnbroe to be very dark coloured and in a state of fermentation. On the following day I made investigations, when I found the source of pollution to be the ditch into which the effluent from Airdrie Sewage Purification Works is discharged. On inquiry at the works, the manager explained that he was aware of the occurrence of pollution and that it was due to two causes—first, the bulking of activated-sludge in the settling tanks, and the passing of such sludge, especially in dry weather, with the effluent to the outfall ditch; and, second, to the passing of “ digester water ” direct to the outfall ditch, owing to the fact that the mine to which such water (and previously activated-sludge) was led had become filled up and could not be used, except on rare occasions, for this purpose. This, incidentally, was the reason for the provision of sludge-digestion plant, which was brought into operation in September, 1935. Generally, it was explained that on account of the very much increased flow of sewage in recent years, due to the extensive provision of modern houses in the burgh, the sewage purification works were overtaxed and that a scheme of extension had been prepared. In the proposed extension provision will be made for “ digester water ” being passed through the works with the sewage. Meantime, this water is the more serious cause of pollution. It is said to be discharged twice a day, the volume each time being approximately 10,000 gallons.

On the afternoon of 18th May I took samples of the North Calder Water above, and a short distance below, the outfall ditch, as well as of the ditch itself. There was no water in the ditch beyond the sewage work's discharge, and at the time of sampling it was very foul and obviously contained the digester water. The North Calder Water below was grossly polluted and in an active state of fermentation. Above the ditch the river was quite clear. On the following day I informed the Sewage Works Manager of the sampling which had been done and what had been found, and suggested that some improvement might be effected if, instead of discharging the “ digester water ” direct to the ditch, it were run on to the sludge-drying beds, and this course was taken on 19th May.

The Chemist's analyses of the samples taken are appended. It will be noted that the ditch and North Calder Water below samples were very foul and contained very large amounts of sewage sludge.



## APPENDIX.

*Analyses of Samples taken on 18th May, 1937.*

- Sample No. 1. *Water*.—North Calder above ditch which receives effluent from Airdrie Sewage Works. Clear. No odour. Trace greyish fibrous deposit.
- „ 2. *Water*.—Ditch conveying effluent to North Calder. Taken as entering North Calder. Opaque. Foul odour. Deposit of sewage sludge amounting to 25 per cent. by volume in 2 hours.
- „ 3. *Water*.—North Calder 25 yards below entrance of ditch.

As above. Sludge 50 per cent. by volume in 2 hours and undergoing active fermentation.

*Results stated as Parts per 100,000.*

	No. 1.	No. 2.	No. 3.
Chlorides as Cl., ... ..	2.0	7.1	4.9
Nitrites, ... ..	Pres.	Nil.	Nil.
Nitrates, ... ..	Trace.	Nil.	Nil.
Oxygen absorbed 4 hours, ...	.22	30.6	60.6
Alkalinity, ... ..	22.7	50.9	27.2
Suspended Solids, ... ..	Trace.	653.0	649.0
B.O.D., ... ..	.24	80.	79.

These results show that this ditch and the North Calder Water below are in a grossly polluted condition.

The matter was taken up with the Burgh Authorities by the County Clerk, and a reply was received to the effect that an extension and improvement of the sewage purification works would shortly be carried out, which, it was anticipated, would remove cause for complaint. The Town Council in dealing with the matter also drew attention to the question of sewage entering the North Calder Water from an area outwith the burgh, which was referred to in a communication from the Burgh Medical Officer of Health to the Town Clerk as follows :—

With regard to the complaint referred to in your letter as to considerable quantities of crude sewage from Carnbroe district entering the North Calder Water above the point where the effluent from the Town Council's Works joins the stream, I have made inquiries, as instructed, and find that sewage from the Carnbroe district enters the North Calder Water *below* the



point where the Burgh Sewage Purification Work's effluent enters. For the information of the Town Council, I might add that I have been informed that sewage from the village of Calderbank discharges to the North Calder Water *above* the Monkland Canal intake, but this, so far as the North Calder Water is concerned, does not affect the interests of the Burgh in any respect. The Monkland Canal is the more likely to interest the Town Council, having regard to the recent extension of the Burgh boundaries, but I have no reason to apprehend danger to health on account of contamination of the canal water by the sewage referred to. In any case, the County Council have in near view the purification of the sewage from the Calderbank area.

*Chapelton Drainage.*—The following communication, dated 9th February, was forwarded to the County Clerk :—

I enclose copy of a letter, dated 21st ultimo, received from Mr. A. Ferguson, Kilmeny, Chapelton, writing on behalf of Chapelton Ratepayers' Association, asking me to visit the village to obtain some information as to the drainage conditions at Chapelton, which the Association allege are very unsatisfactory. Accordingly, on the 4th instant, accompanied by the Rivers Inspector and local Sanitary Inspector, I visited Chapelton and met Mr. Henderson, a member of the Association, who explained the views of the Association. It is alleged that the drainage system is out of date, that offensive odours are at times emitted from the drains at various points, and that the drainage outfalls and disposal arrangements are unsatisfactory.

The day and time of year were not the best for making an inspection, but I was informed that the house drainage discharges to road drains laid in the various streets. These lead to two ditch outfalls which discharge near the public road on to the lands of Noltlairs Dairy Farm, south-west of the village, and join the Powmillon Burn. Such arrangements do not meet with modern requirements, and the Ratepayers' Association are strongly of opinion that the existing drainage facilities hinder development and private building. Indeed, in their view, if provided with satisfactory drainage and sewage disposal, the village is so favourably placed in other respects that many houses would be erected by private enterprise. The Local Authority, as you are aware, decided not to build houses at Chapelton, because of drainage and sewage disposal difficulties, and the fact that there are no local industries likely to involve a demand for new houses. Houses to take the place of condemned property are being built at Strathaven. So far as I am aware, no scheme and estimate of cost have been prepared for Chapelton, but Mr. Henderson stated to me that while of course

there is at present no local drainage assessment, the villagers realise that a heavy assessment would be necessary in the event of a drainage district being formed and drainage works carried out, and would be willing to meet that.

The population of the village is about 500, and the rateable valuation £1,012. The houses number 108, and only 37 are provided with water-closets. All the houses, with the exception of 8, have an inside gravitation water supply.

In the course of my inspection, Mr. Murray of Noltlairs Farm, who joined us, complained about the main outfall ditch. This ditch has been complained of on several occasions in recent years, and the Local Authority, without prejudice, Chapelton not being a special drainage district, have kept the ditch clean and made serviceable a field drain continuation of the ditch. Mr. Murray, however, now considers that the ditch should be diverted (through a drain which is said to exist) north-westwards to the other outfall on his farm to prevent water-logging and bogging of his lands. The latter ditch is said to have originally conveyed the road water and house drainage, but was diverted to its present course to allow of a previous occupier of the farm irrigating part of his lands.

The Drainage Committee will, no doubt, take full cognisance of the local views in reconsidering the question of a drainage scheme for Chapelton.

*Hairmyres Colony Drainage.*—No further progress was made with the question of the more satisfactory disposal of the Colony sewage, pressure of work having prevented the County Drainage, &c. Engineer making his report on alternative schemes for this purpose, and, towards the end of the year, the County Clerk received a communication from the Department of Health, advising him that representations had been made to the Under Secretary of State complaining of nuisance from offensive smells caused by the discharge of sewage from the Colony, the Department also inquiring if steps could be taken to expedite consideration of the matter. In addition to these representations further complaint was made early in the year by the owner of Hayhill House, who has frequently complained of the existence of nuisance conditions due to pollution.

*Kirkintilloch and South Lenzie Sewage Disposal.*—Special inspections were made of the River Kelvin and the sewage irrigation farm at Dryfield during the months of April and May, when unsatisfactory conditions, as a result of intermittent discharges of crude sewage, were noted. Series of samples for analysis were taken on 21st and 27th

April, and, in a communication to the Burgh Engineer forwarding the results of analysis, it was pointed out that, while on the former date the effluent was of very considerable purity, the water of the Kelvin immediately above the Dryfield outfalls was of no value as a diluent for sewage liquors. As to the samples taken on 27th April, it was observed that No. 1 was taken *above* the junction of the Park Burn and was unsatisfactory. No. 2 sample was from the Park Burn itself, which was grossly sewage polluted. Sample No. 3, which was of a discharge from an outfall situated opposite the sewage collecting tank, was described as crude sewage of average strength, and one from the Kelvin about 100 yards below the effluent outfall showed that the river at that point was in a badly polluted condition, due to the discharge of untreated sewage. It was further observed in the communication to the Burgh Engineer :—

I am rather concerned about the results of these inquiries, more particularly serious pollution of the River Kelvin by crude or untreated sewage from the sewage farm. You will no doubt be able to prevent pollution of the Park Burn, which was observed to be heavily sewage polluted on 27th April and 10th May. With regard to the sewage farm, I might say that on 27th April, just before 2 p.m., when the sample was taken, it appeared as if all the sewage were passing crude to the river, and at that time the pump was not in operation. The discharge ceased at 2.5 p.m.

Perhaps you will favour me with your observations on these results, particularly as to any circumstances, normal or otherwise, in which it should be necessary to discharge crude sewage from the farm to the River Kelvin. . . . On the three occasions on which the effluent outfall was inspected, the discharge, while of very considerable purity, was very small in volume and did not at all correspond with the sewage flow, but perhaps this can be explained.

The Burgh Engineer, in a reply, stated :—

Regarding the question of the sample taken on 27th April from the Kelvin, when it appeared as if all the sewage were passing crude to the river, this would be caused by the tank overflowing between the periods of pumping.

The seriously sewage polluted condition of the Park Burn (the Lanarkshire-Dumbartonshire boundary) observed was due to a choke in the outfall sewer and was remedied. It might also be noted that the soil drainage of Woodilee Asylum, which has a population of almost 2,000, was taken into Dryfield Farm in October, 1936.

*Lanark Barracks Sewage Disposal.*—The Chief Engineer, Scottish Command, made inquiry as to the amount of purification which would be necessary, before discharge to the River Clyde, for the sewage from new barracks proposed to be erected near Hyndford Bridge, the maximum population of which will be 300. The matter was continued until the plans of the purification works are available.

*Leadhills Drainage.*—The First District Council forwarded views in the following terms to the Commissioner for the Special Areas relative to the drainage of Leadhills, viz. :—

The drainage at Leadhills is almost primitive. The community are quite unable to bear the expense of modernisation, which would have to be borne by them solely, if carried out by the Public Authority. The question has been raised from time to time, and I feel sure that the County Clerk of Lanarkshire will have in his possession details and estimates of schemes considered, but found to be out of the question, owing to the prevalent circumstances.

Reports by the County Medical Officer and County Drainage, &c. Engineer on these views were submitted. The matter was also considered by the Drainage Committee, who were in possession of information as to the circumstances at Leadhills and the high cost of a drainage scheme for the district, and they agreed to continue consideration of the position at Leadhills along with the circumstances of other more or less similarly placed localities, in making any further applications to the Commissioner for a grant in aid of drainage schemes.

*Lesmahagow Drainage—Lesmahagow Creamery.*—In the report for the preceding year, the question of the disposal of effluents, particularly whey, from Lesmahagow Creamery, and the fact that owing to difficulties in this respect the Creamery was closed down, were referred to. In 1937 the Milk Marketing Board considered reopening the premises during the months of June and July, for the purpose of manufacturing into cheese from 3,000 to 4,000 gallons of milk per day of surplus milk, and, in considering the question of effluents disposal so as to avoid a recurrence of serious pollution of the River Nethan (the Local Authority still not having facilities for treating creamery wastes) a meeting between the officials concerned and the Board's Marketing Officer was held. After full consideration of the matter, an understanding was come to as to the preventive measures which would be taken by the Board, and the Drainage Committee on considering them and other conditions on which there was agreement, decided to offer no objection to the



temporary reopening of the Creamery, subject to their due observance. However, the Board subsequently decided not to reopen the Creamery for the reasons given in the following letter from the Marketing Officer to the County Clerk, dated 24th June :—

I am in receipt of your letter of the 22nd instant regarding the Board's proposal to make cheese for a short time during this season at Lesmahagow Creamery.

After my meeting with the officials of the County Public Health Department in regard to the reopening of the Creamery at Lesmahagow for cheesemaking, I discussed the matter further with the Board, and, in view of the difficulty with which they would be faced in having to transport all the whey on to the adjoining land, and the arrangements which would require to be made to dispose of the ordinary floor washings, it was decided not to open the Creamery meantime.

The Board felt that there was just the possibility of a little whey, at some time or other, finding its way into the river, and since this would be a breach of their undertaking, they considered it advisable not to proceed with cheesemaking at Lesmahagow Creamery until such time as the whey could be utilised by means of condensing.

*New Lanark, &c., Area Drainage.*—The Town Council of Lanark having made an application to the Commissioner for the Special Areas for a grant towards the cost of construction of new sewage purification works, the Commissioner inquired as to whether the proposed works were solely for the Burgh's requirements and whether consideration had been given to the question of the works also dealing with sewage from the adjoining County area. The matter was still under consideration at the close of the year.

*Salsburgh Drainage.*—Complaint was made by a dairy farmer as to the alleged polluted condition of the Shotts Burn on his lands situated below the sewage purification works. Inquiries were made into the complaint and stream and effluent samples taken for analysis. These inquiries and analyses showed that at the time of inspection the water of the stream on the farm, about a mile below the sewage purification works, was sufficiently pure for cattle watering purposes. They also showed, however, that the sewage effluent was not satisfactory, as was the stream immediately below the works. Inspection also showed that the stream had been seriously polluted by crude sewage discharging from a storm overflow pipe on the main outfall sewer

due to a choke in the sewer which probably had relation to the complaint made. This defect was remedied. The question of allowing some of the water of the Shotts Burn to pass the intake to Roughrigg Reservoir, referred to in the report for the preceding year, has not been disposed of. In dry weather, for some distance below the sewage purification works, the only water in the stream is the effluent from the works.

**DRAINAGE AND SEWAGE PURIFICATION SCHEMES.**—Further consideration was given to the question of carrying out additional drainage and sewage purification schemes with the help of grants obtained through the Commissioner for the Special Areas, and, in connection with the further schemes referred to in the County Medical Officer's report of 9th October, 1936, the total cost of which, where ascertained, amounted to £312,690, the following letter, dated 4th February, was received from the Commissioner :—

I am desired by the Commissioner to refer further to your letter, of 15th ultimo, on the above-mentioned subject, and to state that he notes that your Council have had under consideration the question of undertaking further drainage schemes of an urgent character at an estimated cost of between £300,000 and £400,000. The Commissioner also notes that your Council consider that, owing to the abnormally high level of rating and unemployment in the County, it would be impracticable to undertake the works in question within a reasonable period unless assistance towards their cost were provided from the Special Areas Fund.

In order to facilitate the Commissioner's consideration of the various schemes, I shall be glad if you will be good enough to submit particulars of the proposals in the undernoted order, and perhaps your Council will ensure priority of submission to these schemes which, within the categories mentioned below, they regard as most urgent :—

- (1) Schemes which can be advanced as measures designed primarily to facilitate economic development and to effect improvements essential for industrial purposes in the area in which the works are to be carried out.
- (2) Schemes designed to eliminate risk of pollution of the River Clyde.

In this connection it was understood that the schemes already approved were to achieve this object, and, in submitting details of proposals, it should be clearly indicated whether a particular scheme or



schemes, together with the works already in operation, will result in freeing the river of all risk of pollution throughout its whole course within the jurisdiction of your Council.

(3) Schemes supported on grounds of public health.

In submitting details of the proposals as indicated in the preceding paragraph, the Commissioner would be glad to have a definite assurance from your Council to the effect that :—

- (a) any assistance which he might find it possible to provide towards the cost of a particular scheme or schemes will have the effect of advancing materially the dates by which the works would have been undertaken had no grants been provided, and
- (b) such steps as may be appropriate will be taken to ensure that no administrative difficulties exist, or are likely to arise, which might prevent an early commencement of work on schemes which he may find it possible to approve for grant, and that any delay which may occur in the progress of operations will not be occasioned by a lack of adequate provision for handling the works in an expeditious manner.

In conclusion, I am to state that, if upon examination of the schemes and all other relevant factors, the Commissioner is satisfied that a case for grant has been established, due regard will be had to the conditions prevailing in the County of Lanark in determining the extent of the assistance which he would be prepared to offer to your Council in respect of a particular scheme or schemes.

Observations on this letter were submitted by the County Drainage, &c. Engineer and the County Medical Officer, the latter's being conveyed to the County Clerk in the following terms :—

*22nd February, 1937.*—I have carefully considered the terms of the letter, dated 4th instant, received from the Commissioner for the Special Areas in Scotland, copies of which were transmitted to me, and beg to submit undernoted, arranged in the categories mentioned, and in order of urgency, the areas in which schemes of drainage or sewage disposal still require to be undertaken, as to which the question of assistance from the Special Areas Fund has been raised with the Commissioner. The classification is based on the list of schemes as given in my report, dated 9th October, 1936.

- (1) *Schemes which can be advanced as measures designed primarily to facilitate economic development and to effect improvements essential for industrial purposes in the area in which the works are to be carried out.*

*Gartcosh.*

*Note.*—An improved sewage disposal scheme for this area, while not designed primarily to effect improvements for industrial purposes, may afford facilities for the satisfactory disposal of certain polluting trade effluent from Gartcosh Steel Works, a question recently investigated, at the request of the Local Authority, by officers of the Department of Health. These officers have suggested further exploration of the question of improved sewage disposal, and indicated the possibility of solution of the trade effluent disposal difficulty in that direction. Gartcosh, however, really comes within all three categories mentioned by the Commissioner.

In considering categories (2) and (3) it has to be pointed out that few of the schemes under discussion are designed to eliminate risk of rivers pollution only. Most of them, as well as being necessary for preventing rivers pollution, are supported on grounds of public health. The following schemes fall into category (2), it being presumed that “the River Clyde” also means tributaries of the River Clyde. It will be noted that, as these schemes are mainly to prevent rivers pollution, in varying degree, the order of urgency, as compared with the order given in my report of 9th October, 1936, has been somewhat altered.

- (2) *Schemes designed to eliminate risk of pollution of the River Clyde (or its tributaries).*

Newton and Flemington.

Bothwellhaugh.

Cambuslang.

Newmains.

Carstairs.

Cleland and Omoa.

With regard to the Commissioner's request that it should be clearly indicated that schemes coming within category (2), together with the works already in operation, will result in freeing the river of all risk of pollution throughout its whole course within the Local Authority's jurisdiction, I am advised that this object will be attained if the schemes classified in this category were carried out, together with those in the third category.

(3) *Schemes supported on grounds of public health.*

The undernoted schemes are supported on grounds of public health, and are also designed to eliminate rivers pollution.

Calderbank.  
 Douglas.  
 Larkhall (Avon outfalls).  
 Coalburn.  
 Carstairs Junction.  
 Bothwellpark (Muirpark Rows).  
 Bishopbriggs.  
 Bellside, etc., Cleland.  
 Caldercruix and Glengowan.  
 Carnbroe.  
 Crawford.  
 Leadhills.  
 Chapelton.  
 Ferniegair.  
 Birkenshaw.  
 Braidwood.  
 Mollinsburn.  
 Abington.  
 Crawfordjohn.  
 Newbigging.

Schemes for the last six areas in the above list, as mentioned in my report of 9th October last, do not appear to be warranted meantime.

Details of the circumstances surrounding the drainage and sewage disposal requirements of the various areas or special districts embraced in the list are already in your possession, and with regard to paragraphs (a) and (b) under category (3) the Local Authority will no doubt be able to give the assurances asked for.

24th March, 1937.—I duly received your letter of the 11th instant, enclosing copy of report by the County Drainage, &c. Engineer with reference to the communication from the Commissioner for the Special Areas as to grants for additional drainage schemes, and asking my views thereon.

You will find that my report, dated 22nd ultimo, on the same matter expresses views very similar to those of Mr. Stephen. I agree with his observation as to certain further drainage schemes which might be necessary in the event of houses being

constructed at places not now on the list of areas requiring drainage works.

I note the proposals with regard to the sewage from Newton and Flemington Special Drainage District, and I am specially pleased to see that, in the new site for the proposed works to deal with the sewage from Bellshill and Holytown districts, there is the possibility of the sewage from Bothwellhaugh being dealt with by pumping the sewage to Orbiston. I hope that favourable consideration will be given to such a scheme, as when all the schemes at the moment under construction by the County Council and the Burghs of Motherwell and Wishaw and Hamilton are completed in the near future, together with the reconstruction of intercepting sewers in the Glasgow Sewage Purification Area at Rutherglen, and the complete interception of the sewage at present discharged at Westthorn Sewage Purification Works, situated on the right bank of the River Clyde and within the area of the City of Glasgow, Bothwellhaugh will be the only area directly discharging crude sewage to the River Clyde throughout its whole course in the County of Lanark to Dalmarnock Bridge. I might also here observe, with regard to Cambuslang Special Drainage District, that at present the sewage only receives tank treatment at purification works at Threeneuk and Eastfield, and that as pointed out in previous reports, more complete purification of the sewage is desirable, at the former works (which are much the larger) at any rate. In this connection the County Drainage, &c. Engineer informs me that he will probably have to revise his original plans for part of the Carmyle area, and that instead of dealing with this sewage at Daldowie, he will probably advise that it be pumped across the River Clyde to the Cambuslang Works at Threeneuk.

I might again note, with regard to tributary streams, that schemes of sewage purification at present under construction, together with those in the list of suggested schemes, if carried out, would have the effect of freeing all the more important tributaries of sewage pollution. This observation applies particularly to the following tributaries, viz. :—

Douglas Water (Douglas Village).

River Nethan (Lesmahagow, Blackwood and Aucheneath).

Jock's Burn (Carluke).

Garrion Burn (Law).

River Avon (Larkhall).

South Calder Water (Shotts, &c., Holytown and Bellshill).

Shirrel Burn and North Calder Water (Newarthill, Carfin, Calderbank, Baillieston, &c.).

Newton Burn (Newton and Flemington).

With regard to the River Kelvin watershed, the new scheme under construction for Stepps and Chryston and Muirhead will entirely remove sewage pollution of the Garnkirk Burn and Bothlin Burn from these areas respectively, and you are aware of the present position with regard to Gartcosh. With regard to the River Kelvin itself, the sewage from the Burgh of Kirkintilloch and South Lenzie Special Drainage District has been disposed of for 50 years by irrigation at Dryfield Sewage Farm, situated west of the Burgh and within the County of Lanark, where the River Kelvin forms the boundary between Lanarkshire and Stirlingshire, and I am having special inquiries made as to the present condition of the River Kelvin in that area.

These reports were approved of and a decision arrived at to submit to the Commissioner a list of schemes embracing substantially those referred to in the reports, reserving, however, further consideration of them as to order of urgency, etc., as might be necessary, and on the reaffirmed view that they could only be undertaken if a grant considerably larger than had previously been given were available. The list (not including Leadhills, in which case the economic circumstances are very exceptional and are being specially considered by the Commissioner) was as follows :—

Gartcosh.	Bishopbriggs.
Calderbank.	Bellside, etc., Cleland.
Douglas.	Cleland and Omoa.
Larkhall (Avon outfalls).	Caldercruix and Glengowan.
Newton and Flemington.	Cambuslang.
Newmains.	Bothwellhaugh.
Coalburn.	Chapelton.
Carstairs.	Birkenshaw.
Carstairs Junction.	Mollinsburn.
Bothwellhaugh (Muirpark Rows).	

On this list being submitted to him, the Commissioner wrote to the effect that if upon examination of details of the schemes and other relevant factors he is satisfied that assistance is necessary to enable the County Council to undertake necessary works with expedition, he would be prepared to give the most favourable consideration possible to any application for a grant submitted, and asked for transmission, in the order of priority set out in his letter of 4th February, of full details of each scheme including any necessary revision of cost.



Subsequently, the County Drainage, &c. Engineer had a meeting with the Technical Adviser of the Commissioner, when he pointed out that it would be impossible to submit the information desired within a reasonable time, and the Drainage Committee, on 9th September, on further considering the matter in this light, and on the suggestion of the Engineer, agreed that the list should be divided into three groups, the first group to include :—

Calderbank,  
Douglas,  
Newton and Flemington,  
Newmains, Bellside, etc.,  
Carstairs and Carstairs Junction, and  
Bothwellhaugh,

it being possible to furnish, without delay, particulars and full estimates of costs in these schemes. It was also agreed, before proceeding further in the matter, that the Commissioner be asked to state the amount of grant he was prepared to give towards the cost of the schemes, and, on 29th September, the Commissioner informed the County Council that if on examination of the above six schemes he was satisfied as to their merits he would be prepared to consider giving a grant up to 60 per cent. The Drainage Committee therefore instructed that the estimated costs in the case of the six schemes be submitted, and that if, as anticipated, the estimates showed a considerable increase on previous estimates, attention should be drawn to the fact and an increased grant asked for. Later, at a meeting of the County Council held on 10th November, the question of an increase of grant from 40 per cent. to 60 per cent. for schemes being carried out (in view of the indication of a 60 per cent. grant being given for the suggested further schemes) was considered, and the Drainage Committee, on 23rd November, agreed that a deputation should interview the Commissioner on the question as soon as the estimated costs of the further schemes were available.

### Streams.

The inspections of streams numbered 1,082, and 618 samples were taken.

Reference is made in the following pages to streams regarding which complaint was made, and to the action taken in connection therewith.



*Bishopbriggs Burn.*—Attention was again drawn to alleged nuisance conditions arising from the Bishopbriggs Burn as it flows through Cawder Golf Course. Inquiries and inspections were made and samples taken and analysed. At these inspections no nuisance conditions were noted, but the analyses showed (1) that a sample taken in the golf course on 1st June showed the stream to be in a polluted condition, the amount of oxygen absorbed in five days being greater than that required by a clean stream; and (2) that in a series of samples taken on 5th August the burn below Bishopbriggs Sewage Purification Works and on the golf course absorbed four and three times respectively the limit amount of oxygen, in which circumstances it might give rise to an odour. It should be explained that the burn, besides the effluent from the sewage purification works, receives a tributary ditch from Mavis Valley village, the houses in which are gradually being rendered vacant, and that this ditch probably to some extent contributes to the condition of the burn. With regard to the sewage purification works, they are now dealing with a very much increased flow of sewage even compared with the flow when extensions were carried out a few years ago, and further extensions of the plant and sludge disposal works require to be undertaken. Accordingly, the works were included in the list of schemes submitted to the Commissioner for the Special Areas for a grant towards the cost.

*Bothlin Burn.*—Consideration of the question of disposal of acid-pickle effluent from Gartcosh Steel Works was continued, the owners being in consultation with a London firm in the matter.

*Dalzell Burn.*—Complaint was made in the month of April by Lord Hamilton of Dalzell as to gross pollution of the Dalzell Burn (then within the area of the County) and nuisance arising therefrom, due to the discharge into it of a large volume of crude sewage from a Burgh of Motherwell and Wishaw sewer. Investigation of the complaint and consideration of the application of temporary remedial measures and expedition of completion of certain drainage works in the burgh involved a very considerable amount of work in collaboration with the burgh officials concerned before cause for complaint was removed. The whole circumstances, which are of considerable interest, are fully described in the following letters and relative notes sent to the County Clerk, and which were duly considered by the appropriate committee of the County Council. The burn is now wholly within the area of the Burgh of Motherwell and Wishaw, and the only question relating to sewage

pollution still to be finally disposed of is the interception of the drainage from Fleming Electrical Works situated within the County area :—

*13th April, 1937.*—I enclose copy of correspondence relative to a complaint made by the Factor on Dalzell Estate, on behalf of Lord Hamilton of Dalzell, as to serious sewage pollution of the Dalzell Burn within Dalzell Estate, together with, for your information, a detailed note of the action taken thereanent. Having very carefully considered the results of the inquiries made, and, as you will note, having inspected the stream where complained of, I would have no hesitation in expressing the opinion that the Dalzell Burn is in such a state of sewage pollution as likely, in warmer weather, to create a nuisance dangerous to the health of inmates of Dalzell House. The County area concerned, as you are aware, forms part of the lands proposed to be annexed to the Burgh of Motherwell and Wishaw as from 15th May next. I have forwarded a copy of this letter and note to Lord Hamilton's Factor and to the Town Clerk.

*Relative Note.*—The Dalzell Burn has its origin in two headstreams—the Whinny Burn (the main headstream) and the Rumbling Sike, a short stream now almost entirely covered in but for a few yards before its junction with the Whinny Burn. These headstreams unite within the Burgh of Motherwell and Wishaw, near Burngrange, to form the Dalzell Burn. At the point at which the Dalzell Burn emerges from a culvert carrying the old Shields Road, the stream is within the area of the County of Lanark, and flowing northwestwards for about a mile through Dalzell Estate and Policies, for most of the way in a thickly wooded glen, enters the River Clyde. Burngrange House is situated about 40 yards from the burn at its head, and Dalzell House less than 20 yards from it at a point at which it almost overhangs a waterfall in the glen. The garden terraces extend to the water's edge. The stream normally receives, through the headstreams mentioned, mining and industrial effluent discharges, intermittently causing, for the most part, irony discolouration of the stream, and in recent years sewage pollution in varying degree has also occurred and has been the subject of complaint by Lord Hamilton of Dalzell or his Factor, Mr. Wilkinson. The sewage causing such pollution comes from the Burgh of Motherwell and Wishaw as a result of recurring defects in Burgh sewers, understood to have been caused by ground disturbance due to mineral workings in the Shields Road area of the Burgh. With the view to removing cause for complaint the Burgh Authorities have from time to time executed repairs to defective sewers as was found necessary, and have taken other substantial remedial measures, of a temporary nature, for that purpose. As a permanent solution of these difficulties the Burgh Authorities

are at present constructing new intercepting sewers in the area, as well as a new outfall sewer to convey the sewage (together with sewage from part of the Burgh's area conveyed to the County Council's Sewage Purification Works at Low Muirhouse) to the Burgh's Sewage Purification Works at Carbarns. This work was begun in October, 1935, and was due to be finished this month, but owing to construction difficulties which arose it is estimated will not be completed for a period of approximately three months from now.

On 2nd April, Mr. Wilkinson wrote to the County Medical Officer informing him that Lord Hamilton had just returned to Dalzell and was shocked at the condition of the Dalzell Burn due to the discharge of sewage into it in the vicinity of Burngrange, and complaining that the condition created had become a menace to the health of anyone living in Dalzell House, and, further, inquiring whether it were not possible for something to be done to remedy matters. On 5th April the Rivers Inspector made inquiries into the complaint, in the course of which he saw Mr. Wilkinson and the Burgh Engineer. On inspection of the burn and its headstreams he found the main stream to be grossly sewage polluted, a condition contributed to by both the Whinny Burn and Rumbling Sike, the flow of the latter being many times greater than that of the former headstream. He also found evidence of gross sewage pollution of a ditch which joins the Dalzell Burn and crosses the avenue 100 yards or so beyond Burngrange. The present grossly polluted condition of the burn appears to be largely due to the collapse about two months ago of what is known as the Craigneuk sewer at the site of the former Vulcan Works in Shields Road.

The general result of these inquiries was communicated to Mr. Wilkinson on 7th April in a letter, a copy of which was sent to the Burgh Engineer, and, under the same date, Mr. Wilkinson again wrote to the County Medical Officer, enclosing copy of a letter he had received from the Town Clerk (in which it is observed that the conditions complained of were quite unavoidable and would probably continue for a period of approximately three months—until such time as the sewerage works under construction were completed), and stating that Lord Hamilton instructed him to “ask you, as the responsible Medical Officer of Health, whether you consider that it will be safe to continue to occupy these two houses (Dalzell House and Burngrange) during the continuance of the nuisance.”

In view of this further communication, on 8th April the County Medical Officer and Rivers Inspector made further inspections along with the Burgh Engineer, Town Clerk and Town Clerk Depute, and also met Lord Hamilton and Mr. Wilkinson, to whom the circumstances out of which the grossly polluted condition of the burn arose were verbally explained. Thereafter, the officials considered the possibility of taking any

immediate measures to reduce pollution. The Rivers Inspector drew special attention to the Whinny Burn, and the Burgh Engineer said he could have the crude sewage taken out of it in a day or two by anticipating the connecting up of the former County sewer with the new outfall sewer to Carnbarns which was sufficiently well advanced to enable this to be done. This step would have the effect of at once removing a considerable amount of pollution. Another remedial measure suggested by the Burgh Engineer was to fix a series of screens (possibly three) in the short open portion of the Rumbling Sike where it joins the Whinny Burn to intercept grosser sewage solids, which could be removed daily and buried somewhere in the adjoining ground. A third suggestion, made by the County Medical Officer, was that the possibility of chlorination of the burn water might be considered, and it was agreed that this suggestion should be at once explored with the assistance of the County Chemist. It was, however, realised that in view of the extent of the pollution, the only satisfactory remedy was the exclusion of the sewage from the burn, particularly that coming into the Rumbling Sike from the defective Craigneuk sewer, and that, to that end, the completion of the sewerage works should be hurried on.

On 9th April the County Chemist and Rivers Inspector met the Burgh Engineer, together with the Resident Engineer and Clerk of Works on the sewerage contracts, when first of all the positions in which the proposed screens might be put were discussed and agreed on, the Burgh Engineer giving instructions there and then as to their design and fixing so that the work could be done at once. The question of chlorination was very fully considered, and the condition of the Dalzell Burn very carefully noted at Dalzell House, at Burngrange, and particularly at a point between Burngrange and Dalzell House where it is ponded and in a septic condition. In view of all the circumstances, especially the large volume and condition of the burn, the County Chemist's carefully considered opinion was that chlorination was not a practical remedial measure. With regard to speeding up the sewer construction work, the Burgh Engineer agreed to see the contractor, and had it in his mind that if the contractor could not employ additional men and at once proceed with the portion of the Craigneuk sewer from the railway to the junction of Range Road and Shields Road simultaneously with the main sewer in Shields Road, he would undertake the work himself, and considered that the three months mentioned for completion of the works might be thus reduced to two months. At this meeting it was noted that the Whinny Burn was free from crude sewage pollution, the sewage having been diverted from it that forenoon.

15th May, 1937.—To keep you informed of the position in the matter of Lord Hamilton's complaint, I enclose copy of a letter I yesterday sent to the Estate Factor.



*Relative Enclosure.*—Referring to your complaint as to pollution of Dalzell Burn within Dalzell Estate, due to discharges of crude sewage from the area of the Burgh of Motherwell and Wishaw, and the steps taken to remove cause for such complaint, of which I think you have been kept informed, I am very pleased to be able to acquaint you that as a result of the efforts of the Burgh officials concerned, it has been possible to divert all the crude sewage from the burn much sooner than was anticipated, *i.e.*, by the end of this month. This was accomplished on the 11th instant, and the only discharge now ultimately reaching the burn is the infinitesimal flow to the Whinny Burn of effluent from the temporary tank and filter situated near Burngrange. To make the interception of the crude sewage carried in the Rumbling Sike possible at this stage it was found necessary to also intercept temporarily the mine water from Shields Colliery. This discharge will be restored to the burn in about two weeks' time, however.

Since my meeting with you and Lord Hamilton of Dalzell on 8th April, my staff has been in close touch with the Burgh Engineer in the various steps he has taken to advance the sewerage works so that interception of the sewage could be effected at the earliest possible moment, and to-day I again carefully inspected the Whinny Burn and Rumbling Sike stream, as well as the Dalzell Burn at Burngrange and at Dalzell House, and I am glad to say that in my opinion the conditions are now such that there is no possibility of a nuisance dangerous to the health of inmates of Dalzell House or Burngrange arising.

*11th November, 1937.*—Referring to my letter to you of 15th May last and previous correspondence with regard to complaint of sewage pollution of the Dalzell Burn, I have now to inform you that while, on the completion some months ago of the Burgh of Motherwell and Wishaw's sewerage works, serious pollution of this stream within Dalzell Estate ceased, several minor sources or doubtful sources of sewage pollution were not then satisfactorily cleared up. Three of these sources, *viz.*, Burngrange Lodge, Dalzell Home Farm, and Shields Farm, are now situated within the burgh area, as indeed is the whole course of the burn to the River Clyde, and are being dealt with by the Burgh Engineer.

There were still, however, two sources of pollution with which the County Authority was concerned, *viz.*, (1) *Stables, sheds and house, Burngrange, 25 Burnside Street, Motherwell*, owned by the County Council although situated in the burgh, and used in connection with scavenging work. With regard to this source the County Sanitary Inspector informs me that "the drainage from these premises originally discharged into a sewer in Burnside Street, but was cut off by the construction

about six years ago of a new storm overflow by the burgh authority and connected by them to this storm overflow. The burgh have been asked to restore the connection to the sewer, and the work is in progress"; (2) *Flemington Electrical Works*, owned by Messrs. Anderson, Boyes & Co., Ltd., and still situated, but for a small property acquired by the firm some years ago, within the area of the County. After considerable investigation it has been ascertained that the drainage from the conveniences at these works, in which there are over 600 employees, is at present discharging direct to the Rumbling Sike, and must therefore be a source of considerable pollution. This headstream is piped through the works and is thence culverted in its course within the burgh to where it unites with the Whinny Burn to become the Dalzell Burn at Burngrange. The County Council have no sewer in the area, but the plans of the original works (1904) show the drainage as discharging to a septic tank. This arrangement has evidently been altered, and the County Sanitary Inspector is taking the matter up with the owners.

I might also note that the whole of the open portion of the Rumbling Sike beyond Flemington Electrical Works, in the County area, and flowing through land laid out in garden plots and owned by Messrs. Anderson, Boyes & Co., Ltd., is in a very foul condition, probably caused by drainage discharges from burgh properties, and could be considered a nuisance. The Burgh Engineer has promised to endeavour to have this drainage intercepted, and, to improve the existing condition, to also have the watercourse cleaned out.

*Douglas Water.*—A complaint was received in the month of September from the Secretary of the Lanark and District Angling Club regarding the alleged filthy state of the water coming from Douglas West. Special inquiries were made into the complaint, and disclosed unsatisfactory conditions relative to the village sewage interception arrangements which might have had a bearing on the conditions complained of. Measures were taken to prevent a recurrence of cause for complaint in this connection.

*Glenmavis Burn.*—In connection with the de-watering by pumping of the disused Wellside Quarry for the purpose of again working the stone, the owners sought the advice of the Department as to what precautions should be taken to prevent pollution of the Glenmavis Burn, or nuisance during the operations, as a number of carcasses of drowned animals were believed to be in the quarry. Due precautions were taken and no pollution of the burn occurred.



*Kittoch Water.*—During the summer written complaints were received as to the polluted condition of the Kittoch Water due to the effluent discharge from Hawbank Sewage Purification Works. These complaints came from the occupier of College Milton Dairy Farm, and, more insistently, from residents at Castleglen, who complained of very offensive odours arising from the stream. When the complaints were first made, towards the end of May, inspection and inquiry showed that the effluent from the works was unsatisfactory and the stream very seriously polluted, both at Castleglen and where complained of on College Milton Farm, the amount of oxygen absorbed in five days in an effluent sample being eight times greater than that of a standard effluent. With regard to this condition the County Drainage, &c. Engineer explained that for some obscure reason the effluent had deteriorated considerably, but that steps had been taken to deal with the circumstances. Complaint, however, continued to be made, and the Engineer ascertained that a factor bearing on the matter was that the intermittent bulk discharges of washings and milk from the creamery at East Kilbride seemed to have had the effect of upsetting the purification process. This aspect is still being investigated, and the control of admission of these liquids to the sewerage system and purification works, or their exclusion, carefully considered. At inspections made during the month of September, however, the stream was found to be in very good condition and the effluent satisfactory, one of the residents at Castleglen disclosing that there had been no cause to complain for over a month.

*Newton Burn.*—Complaint was made in the month of November as to serious oil pollution of the River Clyde at Clydesmill Electrical Power Station. This oil had come into the river through the Newton Burn, and from careful inquiries made it was ascertained that the condition complained of had been caused by the bulk discharge of oil during the cleaning of a sump at one of the mill engines at Hallside Steel Works. Steps have been taken at the steel works to prevent a similar occurrence. It might also be noted that used oil is centrifugalised and used over again, and it was emphasized at the visits to the steel works that every effort should be made to prevent oil contamination of the burn under all conditions. No further complaint was received, and the normal condition of the stream has been noted to be in all the circumstances satisfactory.

Referring to the question of disposal of acid-pickle effluent from Clyde Nail Works, discussed in reports for preceding years, it has to

be noted that the effluent is now discharged to the public sewer and purification works for the special drainage district in which the nail works are situated. Pollution of the Newton Burn by this effluent has therefore ceased.

*Ponfeigh Burn.*—A suggestion to cover in a portion of the Ponfeigh Burn at Douglas Water was put before the Commissioner for the Special Areas by the First District Council as a scheme which would be a public improvement towards which the Commissioner might give a grant. Reports were submitted by the County Medical Officer and County Drainage, &c. Engineer. The burn receives drainage and effluent from the Rigside area, but the reports referred to bore that there was no urgency for giving effect to the suggestion, and the matter was accordingly continued.

*Pow Burn, Uddingston.*—Complaints were received from residents at Clydeneuk as to serious sewage pollution of the Pow Burn. Inquiries disclosed the fact that the stream was being polluted, as alleged, by crude sewage (1) through the Myers Burn, due to an overflow at Uddingston Sewage Purification Works, and (2) from a pipe situated a short distance above Clydeneuk House. This latter discharge was occasioned by operations in connection with the new outfall sewerage works being carried out in the district. The discharges were discontinued and cause for complaint removed.

*Powmillon Burn, Strathaven.*—In the report for the year 1925 pollution of this stream, which occurred in connection with the cleaning of Threestanes Dam, was referred to as follows:—

Attention was called to the occurrence of pollution of the Powmillon Burn, due to operations in connection with the cleaning out of the dam or reservoir situated to the north-east of Threestanes Farm, and which impounds the water of the Powmillon so as to maintain a power supply for the Town Mill. It was ascertained in the course of inspections and inquiries that the dam had been in existence for very many years and had become silted up to near the overflow level of the weir, and that for the purpose of cleaning the dam the millowner had made broad channels through the silt and had caused the silt to be cut down or loosened with the object of, when there was a good flow of water in the stream, scouring out the dam and thus removing the silt. The result of these operations was that a very large quantity of sand or earthy matter which had naturally deposited in the dam was washed down the stream within short

spaces of time, causing pollution. The millowner stated that he had cleaned out part of the silt in this manner last year, and that he intended to do a part of it each year. There was some doubt as to whether any action could be taken under the Rivers Pollution Prevention Acts, and the circumstances were fully reported to the County Clerk, who took the matter up with the millowner. Subsequently, he had an interview with the millowner, who explained that the method he had adopted of cleaning out the dam was the one usually adopted by other millowners, but that as he was anxious to avoid cause for complaint he would in future arrange for any silt being disposed of in small quantities when the stream was in spate.

It has now to be recorded that similar pollution conditions were noted in 1937, and that from inquiries made it seemed cleaning had been done in several years since 1925, but that possibly the operations in the year now reported on had been more extensive. The stream was observed to be highly discoloured and silted on several occasions during the months of August and September, and it was not at all certain that the operations had been confined to periods of spate. The work was completed in the middle of October, and will most likely be resumed in the current year. The matter was reported to the County Clerk, when it was pointed out that the condition of the stream had been the subject of general comment in the district. The County Clerk communicated with the millowners and asked for an assurance that in future any similar operations would be conducted at times and in such a manner as to occasion no cause for complaint, and further suggested that if difficulty arose at any time as to what might be the effect of their operations they might consult this Department before commencing the work.

#### *River Clyde.*

(a) *At Garrion Mills.*—A complaint was received in the month of June alleging that the River Clyde in the vicinity of Garrion Mills was polluted, that a "very bad smell" came from it, and that a very large trout had been found dead in the mill lade and several other fish, evidently in distress, observed near the surface of the water. Full investigation was at once made into the complaint, but no pollution conditions found likely to give rise to smells as alleged or to the death of fish. In reporting on the matter to the County Clerk observations to the following effect were made:—Four samples of river water (one from the River Mouse and one from the River Clyde at Kirkfieldbank, Crossford and Garrion Mills, respectively) were taken on 1st July. Results of analyses afforded no evidence of pollution, the

amount of dissolved oxygen present in each sample indicating that the water was saturated with oxygen and the amount absorbed in five days within the limit laid down by the Royal Commission for clean streams. Arrangements were therefore made that if any more dead fish were noticed by the complainer they might be secured for examination, and on 12th July he telephoned to say that a dead grayling had been found in the mill lade. The Rivers Inspector obtained the fish without delay, and it was thought advisable, especially in view of complaints in previous years as to dead fish being found in the River Clyde, to have it sent to the Fishery Board for Scotland for bacteriological examination (The Board are very glad to receive specimens of salmon, trout and fresh-water fish suspected of disease for that purpose, the work being done at Edinburgh University). However, the report of the Investigator showed that the fish when received was in a very advanced state of decomposition and was unsatisfactory for the purpose of bacteriological examination.

Arrangements were made for any further communication from the complainer receiving immediate attention, but up to the end of the year no further complaint or communication was received.

(b) *At New Lanark.*—A letter, dated 24th December, was received to the effect that the water of the River Clyde at New Lanark at the beginning of a flood was “black with coal dust,” and suggesting that such an alleged condition might be harmful to fish, and also that coal grit in the water was likely to have a serious effect on the turbines at New Lanark Mills. It was also indicated that such a condition was of comparatively recent occurrence, and suggested that the collieries in the watershed of the Douglas Water were the source of the alleged pollution. The terms of the reply, dated 12th January, 1938, to the complainer’s letter were as follows :—

I duly received your letter of the 24th ultimo, and subsequently obtained the sample of the River Clyde which you took, for both of which I have to thank you. The sample has been carefully examined and reported on to be turbid in character and containing a large grey-black fibrous and flocculent deposit, but no coal washings. The amount of these suspended solids in the sample was 24·0 parts per 100,000. The conditions of the river at the beginning of a flood such as occurred at the time you wrote may be considered as quite normal when the nature of the area drained by the River Clyde, particularly through the Douglas Water and its tributaries, the Coal Burn and Poneil Water, is taken into consideration. With regard to



pollution by coal-dross washings, you can be assured that preventive measures are in operation at all the collieries draining to the streams mentioned, and that these collieries are under close supervision to ensure that the preventive measures are maintained in a satisfactory condition.

*River Nethan.*—A complaint was received as to the sewage polluted condition of the River Nethan below Burnfoot Bridge at Auchenheath. The complaint alleged, particularly, fouling of the banks of the stream, which caused atmospheric nuisance and hindered work in adjoining fruit-growing lands as well as causing crop losses as a result, it was stated, of bushes becoming diseased. The sewage referred to comes from Blackwood and Auchenheath Special Drainage District, and for the purification of which works are under construction.

*South Calder Water.*—Complaint was again made by the owner of Allanton Old Mill as to silting of the dam at the mill. As well as the local authority being concerned with the matter in relation to sewage pollution of the stream, it was brought out that discharges from Kingshill Colliery had also contributed to the silting, and it was suggested that the owners of this colliery should share the cost of cleaning with the County Council. The dam was cleaned out under such an arrangement in the current year.

*Stream at Nerston, East Kilbride.*—Further complaint was made as to pollution of a small stream which runs through the farm of Nerston. This stream is adversely affected by drainage from an extensive piggery and is liable to be affected from other sources. With a view to alleviating the conditions complained of, the stream was cleaned out by the local authority and measures taken at the piggery and elsewhere to prevent or reduce pollution. There is no special drainage district at the place.

*Whinny Burn.*—Towards the end of the year complaints as to (1) oil pollution and (2) "iron" pollution of this stream, which is a tributary of the Dalzell Burn, now within the area of the Burgh of Motherwell and Wishaw, were received. Inquiries showed that the complaints were well founded and that the sources of pollution were, in the case of the oil, the works of the Clyde Alloy Steel Company, and, where the "iron" pollution was concerned, Excelsior Iron Works, both pollutions arising in the County area. With regard to the oil pollution, which appeared to be a comparatively new condition, the cause was, after exhaustive inquiry, found to be leakage from a certain part of the

work's plant, and as soon as this was discovered, satisfactory preventive measures were taken, and cause for complaint removed. With regard to the "iron" pollution, which is of an intermittent character, occurring only at intervals of two or three weeks, its cause is the discharge of acid-pickle effluent from the nail-making part of the Excelsior Works, and is of long standing. Measures for satisfactorily dealing with this effluent are still under consideration.

*United Clyde Angling Protective Association.*—A communication was received from the above Association complaining of industrial pollution of the River Clyde between Garrion Bridge and Dalzell and at Douglas Water. The depositing of old tomato plants in the river and "domestic" pollution were also mentioned. As the communication stated that little or nothing had been done to mitigate the evils of coal-dross washings pollution in the area indicated, information on the matter was given to the Association through its Honorary Secretary, who was also taken by the Rivers Inspector on a tour of inspection of the collieries concerned, when the preventive measures in operation were seen. The question of depositing tomato haulm in the river was dealt with by insertion in the press of a "Public Caution" against the practice. Subsequently, the Honorary Secretary drew attention to an instance of gross coal-dross washings pollution of the River Clyde from Broomside Colliery, which had also been observed by the rivers inspection staff, and which on inquiry was ascertained to be due to the fact that in connection with a defect at the washer the contents of the silt-recovery tank had been discharged direct to the river. Strong complaint was made to the colliery owners in the matter and an assurance given by them that a similar thing would not occur again. Shortly after this complaint the colliery came under the jurisdiction of the Burgh of Motherwell and Wishaw on its boundaries extension.

*West Lothian County Council.*—This County Council have appointed a Rivers Inspector, and as a number of sources of pollution situated in Lanarkshire drain to streams which flow eastwards through or by their area, joint inspections of these sources were made for the purpose of fully informing the new official as to them.



## CHEMICAL LABORATORY.

WALTER BROWN, F.C.S.

The number of samples analysed or examined during the year amounted to 5,399.

The following table shows for each year since 1925 the number of samples analysed :—

SAMPLES EXAMINED IN THE CHEMICAL LABORATORY CLASSIFIED  
ACCORDING TO ADMINISTRATIVE AUTHORITY UNDER WHICH THEY  
WERE OBTAINED.

Year.	Rivers Pollution.			Public Health Department.		Food and Drugs.	Total.
	Sewage Works.	Trade Effluents.	Streams.	Water Supplies.	Special.		
1925	14	413	757	83	116	829	2,212
1926	61	331	696	30	217	978	2,313
1927	96	659	1,083	47	301	1,586	3,772
1928	115	696	1,195	45	933	1,691	4,675
1929	53	713	1,004	46	4,592	1,337	7,745
1930	44	663	1,026	36	1,564	1,813	5,146
1931	39	744	943	61	981	2,785	5,553
1932	98	516	824	72	1,181	2,487	5,178
1933	55	454	889	78	1,434	2,416	5,326
1934	48	435	941	77	1,434	2,321	5,256
1935	36	343	895	87	1,213	2,306	4,880
1936	36	219	524	73	1,114	1,970	3,936
1937	32	229	619	94	2,146	2,279	5,399

### Samples of Sewage.

SEWAGE WORKS.—32 samples from the following sewage purification works :—East Kilbride, 24 ; Bishopbriggs, 2 ; Burgh of Kirkintilloch, 2 ; Burgh of Biggar, Salsburgh, Strathaven, and Harthill 1 sample each.

### Samples of Trade Effluents.

229 samples were examined from the following sources :—

Effluents.							Samples.
Coal Washers,	...	...	...	...	...	...	178
Paper Mills,	...	...	...	...	...	...	33
Pit Waters,	...	...	...	...	...	...	13
Iron Works,	...	...	...	...	...	...	2
Creameries, ...	...	...	...	...	...	...	2
Fireclay Works,	...	...	...	...	...	...	1

### Streams.

619 samples of water, of which 161 were examined for evidence of sewage pollution and 458 specially for trade waste impurities.

*Streams affected by Sewage Pollution.*—River Clyde, routine monthly sampling, 120 samples ; Clyde at Kirkfieldbank, Crossford, and at Garrion Mill, 1 sample each ; North Calder, 8 ; Kitch Water, 5 ; River Kelvin, 4 ; Bishopbriggs Burn, 4 ; Burn at Haggsmuir Farm, 4 ; Shotts Burn, 3 ; Nerston Ditch, 3 ; Biggar Burn, 2 ; Douglas Water, 2 ; Mouse, Park Burn, and Ditch at Glenmavis, 1 sample each.

*Streams affected by Trade Effluents.*—The following table gives the number of samples, the source of pollution affecting same, and the number of samples of effluent examined :—

Streams.				No. of Samples.	Affected by	No. of Samples.
River Clyde,	...	...	...	—	Blantyre Ferme Colliery,	... 23
" "	...	...	...	—	Hamilton Palace Colliery,	... 1
" "	...	...	...	—	Broomside Colliery,	... 6
River Clyde,	...	...	...	—	Priory Colliery,	... 3
and Priory Ditch,	...	...	1	}	Priory Colliery Pit Water,	... 2
and Rotten Calder,	...	...	4			
River Clyde,	...	...	...	—	Clyde Iron Works,	... 1
River Clyde,	...	...	...	—	{ Bothwell Castle Colliery,	... 6
and Jack's Burn,	...	...	7	}	Bothwell Castle Colliery Pit Water	... 1
River Mouse,	...	...	31		Wilsontown Colliery,	... 12
River Almond,	...	...	9	}	Baton Colliery,	... 9
and Currie Burn,	...	...	19			
River Almond,	...	...	4		Muiracre Colliery,	... —
River Almond,	...	...	3	}	Hassockrigg Colliery,	... 2
and Hassockrigg Ditch,	...	...	4			

Streams.	No. of Samples.	Affected by	No. of Samples.
River Almond, ... ..	16	Benhar Colliery Pit Water, ...	6
North Calder, ... ..	16	Caldercruix Paper Mills, ...	21
" " ... ..	4	Stepends Colliery, ...	—
" " ... ..	18	Moffat Paper Mills, ...	12
South Calder, ... ..	3	Shotts Iron Works, ...	—
South Calder, ... ..	—	Kingshill Colliery, ...	4
and Coal Burn, ... ..	2		
and Kingshill Ditch, ... ..	16		
Breich, ... ..	1	Kingshill No. 2 Colliery, ...	—
" " ... ..	2	Southfield Colliery, ...	—
Auchter Water, ... ..	4	Royal George Colliery, ...	1
Barbauchlan Burn, ... ..	11	Dewshill Colliery, ...	2
and Dewshill Ditch, ... ..	2		
Barbauchlan Burn, ... ..	—	Westrigg Colliery, ...	1
Blind Burn, ... ..	3	Stane Colliery, ...	—
Bothlin Burn H.S., ... ..	5	Cardowan Colliery, ...	1
Bothlin Burn, ... ..	2	Gartcosh Iron Works, ...	—
" " ... ..	14	Auchengeich Colliery, ...	11
Butter Burn, ... ..	2	Cadzow Colliery, ...	—
and Meikle Burn, ... ..	5		
Coal Burn, ... ..	7	Dalquhandy Colliery, ...	—
Dalserf Burn, ... ..	2	Broomfield Colliery, ...	2
and Broomfield Ditch, ... ..	16		
Divoty Burn, ... ..	8	Quarter Colliery, ...	6
and Quarter Burn, ... ..	12		
Garrison Burn, ... ..	1	Castlehill Colliery, ...	1
Gateside Burn, ... ..	1	Gateside Colliery, ...	3
Glenboig Burn, ... ..	5	Gartverrie Quarry, ...	—
How Burn, ... ..	7	Barblues Colliery, ...	—
" " ... ..	1	South Blair Colliery, ...	—
Douglas Water, ... ..	1	{ Douglas West Colliery, ...	2
and Kennel Burn, ... ..	2		Pit
		Douglas West Colliery	
		Water, ...	1
Douglas Water, ... ..	—	{ Douglas Colliery, ...	1
		Douglas Pit Water, ...	1
Broadlea Burn, ... ..	1	Douglas Castle Colliery, ...	—
Mollin Burn, ... ..	5	Bedlay Colliery, ...	1
and Luggie Burn, ... ..	1		
Mill Burn, ... ..	34	Cornsilloch Colliery, ...	14
and Cornsilloch Ditch, ... ..	1	Cornsilloch Pit Water, ...	3
Muir Burn, ... ..	2	Auchlochan Colliery, ...	—
" " ... ..	1	Auchlochan No. 9 Colliery, ...	—
Newton Burn, ... ..	4	Hallside Steel Works, ...	—
Luggie Water H.S., ... ..	6	West Cameron Colliery, ...	3
and West Cameron Ditch, ... ..	4		
Earnock Burn, ... ..	5	West Cameron Pit Water, ...	2
		Earnock Colliery, ...	—
Park Burn, ... ..	9	Blantyre Colliery, ...	2
and Blantyre Ditch, ... ..	4		
Pow Burn, ... ..	9	Viewpark Colliery, ...	13
Ravel Burn, ... ..	5	Tannochside Colliery, ...	4
" " ... ..	1	Bredisholm Colliery, ...	—

Streams.	No. of Samples.	Affected by	No. of Samples.
Robroyston Burn, ... ..	40	Wester Auchengeich Colliery, ...	23
and Park Burn, ... ..	16		
Shirrel Burn, ... ..	5	Holytown Colliery, ... ..	1
Shotts Burn, ... ..	6	Hirst Colliery, ... ..	2
Spittal Burn, ... ..	5	Bardykes Colliery, ... ..	6
Whorley Burn, ... ..	—	Mauldslie Mine, ... ..	1
Whinney Burn, ... ..	1	Clyde Alloy Co., ... ..	1
Thankerton Ditch, ... ..	6	Thankerton Colliery, ... ..	4
Woodhall Ditch, ... ..	3	Woodhall Colliery, ... ..	—
Dykehead Ditch, ... ..	3	Dykehead Colliery, ... ..	2
and Dykehead Inundation, ...	2		
Ross Inundation, ... ..	5	Ross Colliery, ... ..	—
Ferniegair Inundation, ... ..	3	Ferniegair Colliery, ... ..	—
Wellside Quarry Water, ... ..	1		
Powmillon Burn, ... ..	2		
Clyde, New Lanark, ... ..	1	{ South Longrigg Pit Water, ... ..	1
		{ Creamery Effluent, ... ..	2

### Water Supplies.

94 samples of water were analysed, 70 from public supplies, and 24 from private sources.

*Water-Works.*—Camps Reservoir, 54 samples ; Blantyre Reservoir, 3 samples ; and Cocksburn Reservoir, 1 sample.

The County domestic supply at Blantyre and Uddingston, 2 samples each ; Bellshill, Plains, Larkhall, Holytown, Cambuslang, Carluke, Eastfield, and Baillieston, 1 sample each.

*Private Supplies.*—Todlaw Farm, Lesmahagow, 6 samples ; Killalles Farm, Kirkmuirhill, 2 ; Douglas West, 2 ; Cranley, Carstairs, 2 ; Spring Valley, Chapelton, 2 ; Drumloch Farm, Chapelton, 2 ; Hyndford Mill, Lanark, 2 ; Laigh Farm, Carmunnock, 2 ; and from Crofts Farm, Newbigging ; Stoneypath Farm, Dunsyre ; Stream at Symington and Blackburn Mill, Strathaven, 1 sample each.

### Food and Drugs.

2,279 samples were examined, consisting of the following :—

	No. examined.	No. not genuine.
Sweet Milk, ... ..	1,556	152
Mince, ... ..	369	39
Sausages, ... ..	125	17

					No. examined.	No. not genuine.
Sausage Meat,	...	...	...	...	55	7
Whisky,	...	...	...	...	31	—
Butter,	...	...	...	...	23	—
Zinc Ointment,	...	...	...	...	14	—
Aspirin,	...	...	...	...	10	—
Jam,	...	...	...	...	9	—
Dripping,	...	...	...	...	9	—
Cream,	...	...	...	...	8	—
Margarine,	...	...	...	...	7	—
Cheese,	...	...	...	...	6	—
Condensed Skim Milk,	...	...	...	...	5	—
Olive Oil,	...	...	...	...	4	—
Boracic Ointment,	...	...	...	...	4	—
Condensed Full Cream Milk,	...	...	...	...	3	—
Honey,	...	...	...	...	3	—
Flour,	...	...	...	...	2	—
Turkey and Tongue,	...	...	...	...	2	—
Tincture of Iodine,	...	...	...	...	2	—
Turpentine,	...	...	...	...	2	—
Dried Fruit,	...	...	...	...	2	—
Grape Fruit Squash,	...	...	...	...	2	—
Cherries,	...	...	...	...	2	—
Tincture of Benzoin,	...	...	...	...	2	—

and 1 sample from each of the following :—Sterilised milk, apples, salmon and shrimp paste, marmalade, oil of wintergreen, lemon curd, lemon syrup, marmalade fruit, jellied veal, cream doughnuts, syrup, potted meat, baking powder, grape juice, lunch sausage, liquid eggs, grape fruit, vinegar, butter milk, skim milk, and camphorated oil.

#### Milk of Hygienic Quality.

519 samples were examined, consisting of the following grades :—

Certified,	...	...	...	...	...	49
Tuberculin Tested,	...	...	...	...	...	411
Standard,	...	...	...	...	...	8
Attested,	...	...	...	...	...	26
Pasteurised,	...	...	...	...	...	25

33 of these samples did not contain the required amount of butter fat, and 9 were deficient in solids not fat.

### **Special Samples.**

Total, 1,627. Milk, 132 samples of milk as supplied to school children, and 47 samples received privately. One sample of Tepaline, a general cleansing compound.

*Institution Supplies.*—81 samples. Sausages, 41; soft soap, 8; soap powder, 8; XX Pale Soap, 5; mince, 4; ground rice, 4; butter, 3; flour, 2; sugar, 2; and 1 sample each of vanilla, rice, coffee, and mixed peel.

### **Pharmacy and Poisons.**

Ammonia, 8 samples; and lysol, 1 sample.

### **Milk Examination—Reductase Test.**

The bacterial content of milk may be ascertained indirectly by reference to the reducing power of the milk sample for certain dyes, such as methylene blue—the so-called reductase test, and this test has been adopted by the Ministry of Health for England, who have laid down a standard for tuberculin tested milk, including certified and accredited milk.

For the purpose of information regarding the general cleanliness of ordinary milk as supplied in the County, 1,225 samples were submitted to this test, with 863 satisfactory results.

### **Milk Examination—The Phosphatase Test for Pasteurised Milk.**

Pasteurised milk is milk which has been heated to 145-150°F., and maintained at that temperature for 30 minutes. The heating of milk, inactivates more or less completely the enzymes which were originally present in the raw milk, and the completeness of their destruction obviously depends very largely on the temperature and the time during which the milk has been exposed to heat. A method for distinguishing between raw and pasteurised milk, which depended on whether the enzyme phosphatase had been destroyed or not, has been described, and adopted in the laboratory during the year. The



test is known as the phosphatase test, and is not only capable of distinguishing between heated and unheated milk, but also serves to determine whether milk described as pasteurised milk has been heated to the proper temperature for the proper time.

132 samples have been examined. These show that pasteurised milk is being sold, not only as sweet milk but, in certain cases, as tuberculin tested milk, and, on the other hand, milk sold as pasteurised milk has been found to have been improperly heated.

165 gallons of distilled water were supplied to various County departments during the year.

## BACTERIOLOGICAL LABORATORY.

T. GOW BROWN, M.B., Ch.B., D.P.H.

The following table shows the total number of specimens dealt with since 1920, and the sources of supply :—

Year.	Specimens.	Sources of Supply.					
		Med. Pract.	P.H. Staff.	Hosp. Staff.	Sch. Med. Staff.	Vet. Surgeons.	Slaugh. Staff.
1920	9,162	3,075	1,205	4,483	90	302	7
1921	10,409	3,118	1,794	5,139	67	285	6
1922	9,702	3,108	2,475	3,803	41	243	31
1923	10,485	3,294	2,062	4,785	84	241	19
1924	11,030	3,537	2,280	4,936	70	189	18
1925	11,193	3,758	2,495	4,517	56	357	10
1926	17,327	6,472	2,769	7,232	49	796	9
1927	19,331	6,382	3,759	8,097	33	1,053	7
1928	21,059	6,051	3,472	10,525	74	934	3
1929	23,296	7,285	4,079	10,301	55	1,564	12
1930	28,589	9,047	5,388	12,362	22	1,768	2
1931	26,761	8,380	5,731	10,715	114	1,814	7
1932	25,796	7,226	5,975	10,857	28	1,699	11
1933	28,861	7,532	4,738	14,846	28	1,707	10
1934	33,097	7,568	4,781	19,045	15	1,682	6
1935	34,318	7,284	4,453	20,686	9	1,881	5
1936	41,935	7,358	5,486	27,315	13	1,759	4
1937	37,631	8,403	5,079	22,072	27	2,050	—

The following table shows the specimens received from the County and from other areas :—

	County.		Other Areas.		Total.	
	+	o	+	o	+	o
SPECIMENS OF HUMAN ORIGIN—						
Tuberculosis, ... ..	1,168	2,976	84	512	1,252	3,488
Typhoid Fever, ... ..	38	591	5	68	43	659
Diphtheria, ... ..	2,179	10,701	488	1,331	2,667	12,032
Cerebro-Spinal Meningitis, ... ..	8	4	—	—	8	4
Venereal Diseases, ... ..	268	1,147	171	466	439	1,613
Miscellaneous, ... ..	1,445	9,934	96	82	1,541	10,016
SPECIMENS FROM ANIMALS—						
Tuberculosis, ... ..	211	2,420	9	117	220	2,537
Anthrax, ... ..	16	—	—	—	16	—
Scabies, ... ..	5	7	—	—	5	7
Miscellaneous, ... ..	63	202	2	15	65	217
Milk for bacterial count, ... ..	670		132		802	
TOTAL, ... ..	34,053		3,578		37,631	

3,578 specimens were received from Local Authorities other than the County of Lanark :—Hamilton, 1,460 ; Motherwell and Wishaw, 493 ; Airdrie, 522 ; Coatbridge, 707 ; Rutherglen, 227 ; Lanark, 84 ; Biggar, 1 ; Dumbarton, 73 ; and other Authorities, 11.

### Tubercle.

4,740 specimens were examined for the presence of *B. tuberculosis*, with the following results :—

	Sputa.		Urines.		Others.	
	+	o	+	o	+	o
Medical Practitioners—County, ... ..	54	483	1	32	2	16
„ „ „ Burghs, ... ..	78	431	2	37	5	43
Hospital Physicians, ... ..	614	1,102	4	37	59	136
Public Health Staff, ... ..	428	1,146	1	24	—	5
	1,174	3,162	8	130	66	200

Throughout the year specimens submitted for examination for tubercle bacilli have been investigated by cultural methods as well as biologically.

Experiments have been very promising and there is no doubt that culture gives many positive results that cannot be demonstrated by direct microscopic examination, particularly in material from lesions caused by the human type of bacillus; however, animal inoculation cannot be superseded entirely by cultural methods as several instances of tuberculous infection have been proved biologically.

When culture is positive much time is saved as a result can be given in about a fortnight, and a provisional diagnosis of type of infection is shown by the character of the growth.

Further investigation of the possibilities of culture in diagnosis of tuberculosis is necessary as it promises a real economic and time-saving advantage in the examination of doubtful cases.

### Typhoid Fever.

702 specimens were examined.

		Agglutination Test.		Blood Cultures.		Faeces.		Urines.	
		+	o	+	o	+	o	+	o
Medical Practitioners—									
County,	...	19	81	—	—	4	315	—	8
Burghs,	...	6	37	—	—	—	22	—	8
Hospital Physicians,		13	36	—	14	1	48	1	27
Public Health Staff,		2	12	—	—	1	23	—	24
		40	166	—	14	6	408	1	67

### Diphtheria.

Swabs were examined for *B. diphtheriae* in 14,699 instances.

				Throat.		Nose.	
				+	o	+	o
Medical Practitioners—County,	...			323	1,952	8	31
„ „ Burghs,	...			480	1,308	8	23
Hospital Physicians,	...	...	...	1,342	5,369	446	2,500
Public Health Staff,	...	...	...	44	792	15	58
				2,189	9,421	477	2,612



*Ophthalmia Neonatorum*.—184 specimens were received and examined, with the following results :—Gonococci, 10 ; staphylococci, 34 ; “ diphtheroid ” bacilli, 37 ; pneumococcus, 10 ; streptococci, 2 ; no organisms, 91.

### Miscellaneous Specimens.

*Vaccines*.—29 were prepared, 27 being for medical practitioners.

*Vincent's Angina*.—2 specimens were examined with negative results.

*Puerperal Fever*.—238 blood cultures were examined. Streptococci were recovered in 24 cases.

*Urine for Albumen*.—146 specimens gave 31 positive results.

*Faeces for Dysentery*.—745 specimens gave 31 positive results.

*Swabs for Haemolytic Streptococci*.—9,101 specimens gave 690 positive results.

*Others*.—The other miscellaneous specimens included pus and urine for pathogenic bacteria ; blood films for malaria and other blood diseases ; hairs for ringworm ; foodstuffs for the food-poisoning group of organisms ; and potable and bath waters.

### Specimens from Animals.

*Milk for Tubercle*.—2,619 samples of milk were received from various Veterinary Inspectors and the Public Health Staff, of which 39 were found positive by microscopic examination, and 167 by biological examination, making a total of 206 positive samples.

*Cow Sputum*.—135 specimens were examined, and acid-alcohol-fast bacilli were found in 34.



			Milk.			Cow Sputum.		Others.	
			+		o	+	o	+	o
			Biolo- Smear. gical.						
County, ...	...	...	39	150	2,287	34	101	3	6
Other Areas,	...	...	—	17	126	—	—	—	—
			39	167	2,413	34	101	3	6

The above samples of milk were also examined for other organisms (streptococci, etc.), with 192 positive results.

*Anthrax*.—16 specimens were submitted by the County Veterinary Inspector, and all were positive.

*Scabies*.—12 specimens were examined, and gave 5 positive results.

*Others*.—In 267 specimens examined, 81 positive results were found—organisms, 78 ; tubercle, 3.

#### COUNTY AREA.

					Certified Milk.	Tuberculin Tested Milk.	Standard Milk.	Pasteurised Milk.	Ordinary Milk.	Tuberculin	
Under 5,000 bacteria per c.c.,					19	107	—	3	2		
Over 5,000 and	„	10,000	„	„	17	89	1	—	6		
„	10,000	„	„	20,000	„	„	5	—	6		
„	20,000	„	„	30,000	„	„	—	54	2	1	6
„	30,000	„	„	100,000	„	„	2	86	1	2	18
„	100,000	„	„	200,000	„	„	—	25	2	—	6
Over 200,000					„	„	5	86	1	—	16
Totals, ... ..					48	536	12	6	60		
Coliform bacillus present, ...					12	81	3	3	30		

## OTHER AREAS.

					Certified Milk.	Tuberculin Tested Milk.	Standard Milk.	Pasteurised Milk.	Ordinary Milk.	Tuberculin Tested (Past.) Milk.
Under 5,000 bacteria per c.c.					7	13	—	—	1	1
Over 5,000 and	„	10,000	„	„	1	11	1	—	3	—
„	10,000	„	„	20,000	„	—	22	1	5	—
„	20,000	„	„	30,000	„	—	5	—	1	—
„	30,000	„	„	100,000	„	—	9	2	11	—
„	100,000	„	„	200,000	„	—	9	1	4	—
Over 200,000					„	—	14	—	7	—
Totals, ... ..					8	53	5	3	32	1
Coliform bacillus present, ...					—	11	—	—	11	—

## Destruction of Rats.

1,310 bottles of rat virus were supplied, free of charge on application, to farmers, householders, shopkeepers, etc.

## COUNTY HOSPITAL

NEAR

## MOTHERWELL

REPORT BY THE PHYSICIAN-SUPERINTENDENT

JOHN REID, M.D., D.P.H., F.R.F.P.S.

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1937.

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At the beginning of the year 208 patients were in residence. Throughout the year 2,270 were admitted, making a total of 2,478. Of these, 2,123 were discharged recovered or improved, 150 died, and 205 were in hospital at the end of the year. The total admissions were 234 greater than for 1936.

SCARLET FEVER admissions were 668, or 218 more than the previous year. The type of disease was mild—nearly 90 per cent. were classified as mild. No fatal cases occurred throughout the year. Although a few years ago the type of disease was milder, this is the first year in the history of the hospital that no death occurred from scarlet fever. The infectivity rate was 3·8 per cent., or about what it usually is when the total numbers are low. The average residence was decreased by one and a half days. The complication rate and the corrected diagnosis rate were slightly increased from those of the previous year. The routine of swabbing for haemolytic streptococci before discharge of convalescents was discontinued as of little practical value. The only exception to this was in convalescents returning to dairy farms. Swabs for diphtheria bacilli on discharge of scarlet convalescents are of definite value.

DIPHtheria admissions were 503, or 8 more than for the previous year. The type of disease was more severe. Approximately, the cases classified as very severe were increased by 3 per cent. The average amount of serum administered to the clinical cases was 29,500 units as compared with 19,100 units for 1936. The fatality rate was 5·4 per cent., or the same as for the previous year. This figure is calculated on the clinical cases only. The corrected diagnosis was 41·2 per cent., or lower by 1·7 per cent. More complications were recorded. 21·8 per cent. of the cases exhibited one or more complications as compared with 10 per cent. for 1936.

## PRINCIPAL STATISTICS.

### IN-PATIENTS.

1. TOTAL NUMBER OF ADMISSIONS, ... ..	2,270
2. TOTAL NUMBER OF PATIENTS DISCHD. RECD., ...	2,123
3. TOTAL NUMBER OF DEATHS, ... ..	150
4. FATALITY RATE, per cent., ... ..	6.5
5. AVERAGE DURATION OF STAY OF PATIENTS (included in 2 and 3 above), days, ... ..	31.8
6. NUMBER OF BEDS OCCUPIED :—	
(a) Average during year, ... ..	188
(b) Highest (on 26th January, 1937), ... ..	258
(c) Lowest (on 17th July, 1937), ... ..	118
7. NUMBER OF SURGICAL OPERATIONS :—	
Under General Anaesthesia, ... ..	127
Other Operations, ... ..	511
8. TOTAL PATIENT DAYS, ... ..	72,224

### OUT-PATIENTS.

9. TOTAL OUT-PATIENTS SEEN :—	
Venereal Diseases, ... ..	413
X-ray Department, ... ..	1,381
Ear, Nose and Throat, ... ..	174
Diabetic Clinic, ... ..	147
Eye Clinic, ... ..	106
10. TOTAL ATTENDANCES :—	
Venereal Diseases, ... ..	7,089
X-ray Department, ... ..	1,714
Ear, Nose and Throat, ... ..	325
Diabetic Clinic, ... ..	879
Eye Clinic, ... ..	227

### Scarlet. Diphtheria. Puerperal. Erysipelas. Pneumonia.

Admissions, ...	668	503	117	87	386
Recovered, ...	548	294	91	73	178
Died, ...	—	17	8	1	63
Fatality rate %, ...	—	5.4	8.08	1.3	26.1
Complications %, ...	39.2	21.8	27.2	14.8	16.5
Revised diagnoses %, ...	17.8	41.2	18.8	12.9	34.8
Av. residence in days, ...	39.5	40.8	39.3	19.6	27.9

ENTERIC FEVER.—Only 6 cases were admitted to hospital, and of these 3 were proved cases.

PNEUMONIA admissions were 386, or 30 in excess of the previous year's figures. The fatality rate was 26·1 per cent. of the verified cases, or approximately 0·5 per cent. lower than 1936. Fifteen patients were moribund on admission to hospital. The average day of disease was 5·3 days. The complications were decreased by 10·6 per cent.; the corrected diagnosis rate by 3·5 per cent.; and the patients were in residence 2·4 days less than for the previous year.

TUBERCULOSIS work is still declining and largely comprised pneumothorax work, meningeal cases, and patients for diagnosis.

PUERPERAL SEPSIS.—The number of admissions was 117, or 8 more than for the previous year. The fatality rate was 8·08 per cent., or the lowest on record for the hospital. Although cases classified as severe were 2 per cent. lower, septicaemic cases were greater by 6. The average day of disease on admission was 4·1 days. The corrected diagnosis rate was decreased by 5·5 per cent.

In last year's report an extract was given from a paper by Dr. Hendry on anaemia associated with puerperal sepsis. During 1937, Dr. Macrae continued this work with special reference to the bearing of ante-natal anaemia to puerperal sepsis. On going into the ante-natal history of puerperal cases suffering from profound anaemia, it is evident that many patients suffer from varying degrees of anaemia during pregnancy, and what is more astonishing is the fact that many of these women are not receiving treatment during the pregnancy.

ERYSIPELAS.—Eighty-seven patients were admitted, or 8 in excess of last year's number. On the whole, the type of disease was mild. One mild case died from arterio-sclerosis and myocarditis. Ultra-violet light was used in most of the cases. Prontosil or proseptasine and light were also tried. The numbers were too few and the type so mild that it is impossible to give relative values.

VENEREAL DISEASES.—As before, the indoor work is chiefly confined to complicated cases, children and female gonorrhoeas. The total numbers are much the same as for previous years. The outdoor attendances were increased by 876 for the year. It should be noted when comparing the figures on page 34 that one attendance means one

patient. When a patient suffering from a double infection receives two injections, an irrigation and a dressing at one visit, that is recorded as one attendance and not 3 or 4 attendances.

**RADIOLOGICAL WORK.**—1,714 cases were photographed. The large proportion of this work is for tuberculosis dispensaries and sanatoria. Later, tables give details of the work and the centres from which the patients are drawn.

The number of admissions from *all diseases* was greatest in the month of January, when 248 patients were admitted. For the week ending 23rd January, 78 were recorded, and the greatest number admitted on any one day was 18 on the 22nd January, 1st February, and 27th September. The average daily number resident was 188, or 24 more than for 1936. The greatest number resident on any one day was 258, on 26th January, and the smallest, 118, on 17th July.

The average duration of residence of all cases was 31·8 days ; of recovered cases, 33·2 days ; and of fatal cases, 10·4 days.

The fatality rate, calculated on all cases discharged, was 6·5 per cent., or 1·5 less than for 1936. This figure includes all cases dying in hospital. Eighteen died within 24 hours of admission. A post-mortem examination was performed in 56·6 per cent.

Request for removal of patients to hospital was made by the medical attendant in 38·1 per cent. of the cases, and by the Public Health Department in 61·8 per cent.

**REVISED DIAGNOSES.**—In 631 cases, or 27·7 per cent. of the total discharges, the diagnosis on admission was revised. The figures for the principal diseases were :—Scarlet fever, 17·8 per cent. ; diphtheria, 41·2 per cent. ; puerperal sepsis, 18·8 per cent. ; erysipelas, 12·9 per cent. ; venereal diseases, 37 per cent. ; and pneumonia, 34·8 per cent.

### SCARLET FEVER.

At the beginning of the year 54 patients were in residence, and 668 were admitted as scarlet fever. The diagnosis was revised in 119, and 5 others proved to be cases of scarlet fever. Of these 608 patients, 548 were discharged well, and 60 were in hospital at the end of the year.



REMOVAL TO HOSPITAL was carried out within the first three days of illness in 77 per cent.

THE AVERAGE DAY OF DISEASE in all cases was 3 days.

THE AVERAGE DURATION OF RESIDENCE of all cases was 39·5 days. The following table indicates the period of residence of the 548 recovered cases :—

Week of Discharge.	No. of days in residence when Discharged.								No. of Cases in each day.								No. of Cases in each week.
Under fifth,	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	
Fifth,	...	29	30	31	32	33	34	35	41	50	37	20	28	24	11	211	
Sixth,	...	36	37	38	39	40	41	42	8	14	12	15	13	8	12	82	
Seventh,	...	43	44	45	46	47	48	49	5	11	9	3	4	9	4	45	
Eighth,	...	50	51	52	53	54	55	56	6	8	3	2	5	3	4	31	
Ninth,	...	57	58	59	60	61	62	63	3	5	4	1	—	6	2	21	
Tenth,	...	64	65	66	67	68	69	70	2	1	1	1	2	2	1	10	
Over ten wks,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	37	
Total Number of Cases, ... .. 548																	

TYPE OF DISEASE.—487, or 88·8 per cent., of the total discharges were classified as mild ; 56, or 10·2 per cent., as moderately ill ; and 5, or 0·9 per cent., as very severe. In the last group 1 was a septic case.

THE FATALITY RATE was nil, there being no deaths from scarlet fever during the year.

CORRECTED DIAGNOSES.—Of the cases notified as scarlet fever, 119, or 17·8 per cent., were wrongly diagnosed. These were :—Adenitis, 3 ; albuminuria, 2 ; bronchitis, 1 ; burn, 2 ; chickenpox, 1 ; chronic otitis media, 1 ; constipation, 1 ; dermatitis, 1 ; diphtheria, 1 ; doubtful, 31 ; endocarditis, 1 ; enema rash, 1 ; erythema, 4 ; marasmus, 1 ; measles, 1 ; negative, 19 ; nephritis, 1 ; rhinitis, 11 ; sacro-iliac disease, 1 ; septicaemia, 2 ; septic mouth, 1 ; septic spots, 1 ; septic tonsils, 7 ; sore throat, 14 ; tonsillitis, 7 ; whooping cough, 3.

CASES WHICH PROVED TO BE SCARLET FEVER on observation were admitted to hospital as :—Diphtheria, 4 ; streptococcal throat, 1.

COMPLICATIONS.—215, or 39·2 per cent., of the cases discharged had one or more complications.

*Glands.*—106, or 19·3 per cent., of the cases discharged showed glandular enlargement. These were :—Non-suppurative adenitis, 99 ; suppurative adenitis, 7. All degrees of glandular involvement are included.

*Ear.*—34, or 6·2 per cent., developed otitis media. Mastoiditis followed in 3 patients.

*Heart.*—In 4 patients transient murmurs occurred. Arrhythmia was noted in 2 instances.

*Nose.*—49, or 8·9 per cent., developed rhinitis.

*Joints.*—In 11, or 2 per cent., transient arthritis was present.

*Kidney.*—11, or 2 per cent., had true nephritis, and 6 albuminuria.

*Lungs.*—Pleural effusion, 1.

*Eye.*—Conjunctivitis, 1 ; dacryocystitis, 2.

*Skin.*—Dermatitis, 3 ; secondary erythema, 1.

*Sepsis.*—Abscesses and septic sores, 19 ; boils, 3 ; paronychia, 10 ; styes, 2.

*Others.*—Enteritis, 2 ; facial paresis (temporary), 1 ; jaundice, 4 ; positive swab (diphtheria bacilli), 24 ; secondary sore throat, 2 ; Sonne dysentery, 6 ; tonsillitis, 7 ; vaginitis, 6.

*Other Conditions present on Admission.*—Abscesses, 2 ; adenitis, 27 ; albuminuria, 1 ; anaemia, 4 ; blepharitis, 1 ; bronchitis, 1 ; burns, 4 ; cardiac disease, 2 ; chronic dermatitis, 1 ; chronic otitis media, 8 ; dog bite, 1 ; enteritis, 1 ; fracture of leg, 2 ; herpes, 2 ; impetigo, 3 ; incontinence of urine, 1 ; lymphangitis, 1 ; malnutrition, 1 ; pregnancy, 1 ; psoriasis, 4 ; rectal prolapse, 1 ; rhinitis, 35 ; scabies, 3 ; septic sores, 7 ; tapeworm, 1 ; total blindness, 1 ; tubercular glands, 1 ; tubercular hip joint, 2 ; vaginitis, 2.

The two following tables show the age-periods and week of illness at which the complications occurred :—

AGE.	CERVICAL ADENITIS.		OTITIS MEDIA PURULENTA.			CARDIAC COMPLICATIONS.		Rhinitis.	Mastoiditis.	Arthritis.	Nephritis.
	Suppurative.	Non-Suppurative.	Left.	Right.	Double.	Organic.	Functional.				
Under 1 Year,	—	1	—	—	1	—	—	—	1	—	—
-2 Years,	2	6	1	2	2	—	—	1	—	—	—
-3 "	2	8	2	2	—	—	—	7	2	—	—
-4 "	—	15	2	1	1	—	—	6	—	—	2
-5 "	2	14	2	—	1	—	—	8	—	1	4
-6 "	1	9	1	3	—	—	—	2	—	1	2
-7 "	—	6	—	2	2	—	1	5	—	1	—
-8 "	—	10	—	2	—	—	1	7	—	—	—
-9 "	—	6	1	2	—	—	1	4	—	—	1
-10 "	—	6	1	—	—	—	1	3	—	2	1
-15 "	—	11	—	1	—	—	—	4	—	2	—
-20 "	—	3	1	1	—	—	—	1	—	2	—
Over 20 "	—	4	—	—	—	—	—	1	—	2	1
Total,	7	99	11	16	7	—	4	49	3	11	11

WEEK OF ILLNESS.	CERVICAL ADENITIS.		OTITIS MEDIA PURULENTA.			CARDIAC COMPLICATIONS.		Rhinitis.	Mastoiditis.	Arthritis.	Nephritis.
	Suppurative.	Non-Suppurative.	Left.	Right.	Double.	Organic.	Functional.				
First, -	—	20	—	—	3	—	—	12	—	8	—
Second, -	1	29	6	7	4	—	1	6	—	1	1
Third, -	4	29	2	1	—	—	2	14	—	1	4
Fourth, -	—	17	2	4	—	—	—	7	1	1	2
Fifth, -	1	2	—	—	—	—	—	6	1	—	2
Sixth, -	1	2	1	1	—	—	—	1	1	—	1
Seventh, -	—	—	—	—	—	—	—	1	—	—	—
Eighth, -	—	—	—	1	—	—	—	1	—	—	1
Ninth, -	—	—	—	1	—	—	—	—	—	—	—
Tenth, -	—	—	—	1	—	—	1	1	—	—	—
Total, -	7	99	11	16	7	—	4	49	3	11	11

TREATMENT.—Throughout the year scarlet fever was mild in character. There were no deaths and approximately 90 per cent. were classified as mild. It was therefore unnecessary in the majority of cases to use antitoxin.

The following figures, although of little value, are detailed in relation to the incidence of complications and duration of residence in hospital :—

	352 Non-Serum Cases.	57 Serum Cases.	117 Prosentasine Cases.	22 Serum and Prosentasine Cases.	Total Cases.
Complications, ...	114.32.3%	25.43.8%	62.52.9%	14.63.6%	215.39.2%
Average residence,	37.1 days.	41.9 days.	43.2 days.	51.5 days.	39.5 days.
Average dose of Serum, ...	—	7,500 units.	—	8,400 units.	—
or					
Drug, ...	—	—	10.2 gms.	12.5 gms.	—

DIPHTHERIA ANTITOXIN.—27 patients had, on an average, 8,300 units. 17 of these cases had scarlet fever antitoxin in addition to diphtheria antitoxin.

MIXED INFECTIONS.—Chickenpox, 4 ; whooping cough, 1.

CROSS INFECTIONS.—3 patients were incubating chickenpox and 4 others were cross infected.

“ RETURN ” CASES.—28 days is taken as the period within which a case is regarded as a “ return.” In the following figures, cases which proved on observation not true scarlet fever have been disregarded. 21 cases discharged from hospital presumably infected 25 others. Of the “ infecting ” cases, 2 had nephritis, 1 otitis media, 1 paronychia, 3 rhinitis, 1 transient arthritis, and 4 transient murmurs while in hospital. The others were apparently “ clean ” cases. 4 of the “ infecting ” cases had scarlet fever antitoxin while in hospital. The average duration of residence of the “ infecting ” cases was 47.4 days.

The infectivity rate was 3·8 per cent. of all true cases discharged.

Summary of the more important statistics relating to scarlet fever during the past six years:—

	1932.	1933.	1934.	1935.	1936.	1937.
Number of scarlet fever patients discharged recovered, ... ..	1,081	1,184	872	397	375	548
Number of presumably infectious cases discharged, ...	28	33	32	14	15	21
Infectivity rate, ... ..	2·5	2·7	3·6	3·5	4	3·8
Number of deaths from scarlet fever, ... ..	10	7	9	5	5	—
Fatality rate, ... ..	0·9	0·5	1·02	1·2	1·3	—
Average duration in days of the cases discharged, ...	40·1	36·5	40·5	40·2	41·1	39·5

#### SCHICK TEST IN SCARLET FEVER.

##### AGE PERIODS.

	1	2	3	4	5	6	7	8	9	10	Over 10	Total.
Positive, ...	3	28	47	44	46	35	18	26	10	12	57	326
Negative, ...	6	23	22	27	37	21	28	18	15	15	90	302
Total, ...	9	51	69	71	83	56	46	44	25	27	147	628

114 of the susceptibles were fully immunised with toxoid-antitoxin floccules and 111 with alum precipitated toxoid, while 99 were discharged before completing immunisation.

#### PROPHYLAXIS IN OTHER DISEASES.

Children admitted to hospital suffering from other diseases, like measles, whooping cough, pneumonia, etc., as far as possible had the Dick Test performed, and the susceptibles were immunised.

Of 219 cases, 22 were positive and, of these, 3 were fully immunised against scarlet fever.

## DIPHTHERIA.

At the beginning of the year 77 patients were in residence, and 503 were admitted as diphtheria. The diagnosis was revised in 218, and 3 others proved to be cases of diphtheria. Of these 365 patients, 294 were discharged well, 17 died, and 54 were in hospital at the end of the year.

REMOVAL TO HOSPITAL was carried out within the first three days of illness in 62·3 per cent. of the cases.

THE AVERAGE DAY OF DISEASE of all cases was 3·3 days, and 3·3 days in the fatal cases.

DURATION OF RESIDENCE.—The average duration of residence of all cases was 40·8 days ; of recovered cases, 42·7 days ; and of fatal cases, 9·5 days. Four of the fatal cases died within 24 hours of admission.

SITE OF MEMBRANE.	MILD.		MODERATE.		SEVERE.		TOTAL		Percentage of Total Cases.
	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.	
Faucial, ... ..	215	—	52	—	10	11	277	11	92·6
Laryngeal, ... ..	4	—	1	—	1	1	6	1	2·2
Faucial and laryngeal,...	—	—	1	—	—	1	1	1	0·6
Faucial and nasal, ...	1	—	2	—	2	3	5	3	2·5
Tracheo-bronchial, ...	—	—	—	—	1	—	1	—	0·3
Convalescent, ... ..	1	—	—	—	—	—	1	—	0·3
Haemorrhagic, ... ..	—	—	—	—	—	1	—	1	0·3
Post-diphtheria paresis,	—	—	2	—	1	—	3	—	0·9
	221	—	58	—	15	17	294	17	—

The classification of the disease is according to the site of the membrane and the degree of toxæmia. In the mild cases the membrane or exudate was small and unaccompanied by toxæmia ; in the moderate group the membrane was more extensive and the toxæmia considerable ; and in the severe type the membrane was extensive and the toxæmia profound.

Bacteriological cases and those with deposits of mucus due to other organisms are excluded from the figures.



FAUCIAL DIPHTHERIA (288 or 92.6 per cent.).—A comparison with the figures of the previous year shows a decrease of 5 per cent. in the mild group, an increase of 3.4 per cent. in the moderate group and 1.6 per cent. in the severe group. Of the total faucial cases, 74.6 per cent. were mild, 18 per cent. moderate, and 7.2 per cent. severe. Serum was administered previous to admission in 24 cases. The average quantity given in hospital was 25,600 units, or 6,800 units more than in the previous year. The average dose of antitoxin in the mild group was 13,500 units; in the moderate group, 35,900 units; and in the severe group, 118,800 units. In addition to diphtheria antitoxin, 26 patients had, on an average, 6,500 units of scarlet fever antitoxin. Complications were noted in 59 patients. Paralysis developed in 17 patients, and 67 had serum after-effects. The fatality rate in the pure faucial cases was 3.8 per cent., as compared with 4 per cent. for the previous year. The organism was tested for virulence in 72 cases; 69 were avirulent and 3 virulent.

LARYNGEAL DIPHTHERIA (7 or 2.2 per cent.).—In 7 patients the larynx was solely involved. The disease was mild in 4, moderate in 1, and severe in 2. Tracheotomy was performed in 1 severe case, followed by recovery. The other severe case was admitted practically dead. The average amount of serum administered was 22,600 units. Two patients, who had scarlet fever antitoxin in addition to diphtheritic serum, developed urticarial rashes.

FAUCIAL AND LARYNGEAL DIPHTHERIA (2 or 0.6 per cent.).—Of the 2 patients in this group, 1 recovered after 20,000 units of diphtheria antitoxin, and the other, who had tracheotomy performed, died. This patient had 100,000 units of diphtheria antitoxin. Both cases had, in addition, scarlet fever serum.

FAUCIAL AND NASAL DIPHTHERIA (8 or 2.5 per cent.).—One was classified as mild, 2 moderate, and 5 severe. Three of the latter group were fatal. The average amount of serum given was 152,500 units. In addition, 6 patients had scarlet fever antitoxin. Two developed serum rashes. The 3 fatal cases were not admitted till after the fourth day of illness. Paralysis developed in 4, and other complications in 6.

TRACHEO-BRONCHIAL DIPHTHERIA (1 or 0.3 per cent.).—A pregnant adult female was admitted on the fifth day of illness suffering from severe tracheo-bronchial diphtheria necessitating aspiration followed by tracheotomy. She had 60,000 units of serum, and 9,000 units of scarlet fever antitoxin. During convalescence she miscarried.

HAEMORRHAGIC DIPHTHERIA (1 or 0·3 per cent.).—A girl, aged 6 years, was admitted moribund from a haemorrhagic diphtheria in the sixth day of illness. Three of the 6 days were wasted in waiting for a swab result.

POST-DIPHTHERIA PARESIS (3 or 0·9 per cent.).—Three missed cases were admitted after severe paresis had developed.

DIPHTHERITIC PARALYSIS.—Twenty-four, or 7·7 per cent., of the clinical cases developed one or more forms of paresis. The varieties were :—Cardiac, 2 (fatal) ; eye, 2 ; legs, 1 ; legs and back, 1 ; palate, 7 ; palate and eye, 2 ; palate and legs, 3 ; palate and pharynx, 2 (fatal) ; palate, pharynx and eye, 2 ; palate, pharynx, eye and legs, 1 ; palate, pharynx and legs, 1.

COMPLICATIONS.—Sixty-eight, or 21·8 per cent., of the cases developed one or more complications. This figure does not include serum after-effects. These were :—Abscesses, 2 ; adenitis, 8 ; albuminuria, 29 ; boils, 1 ; bradycardia, 7 ; bronchitis, 1 ; nephritis, 3 ; otitis media, 5 ; paralysis, 24 ; paronychia, 1 ; rhinitis, 2 ; secondary sore throat, 2 ; septic finger, 1 ; tonsillitis, 2 ; uraemia, 1 ; vaginitis, 5.

OTHER CONDITIONS PRESENT ON ADMISSION.—Adenitis, 5 ; albuminuria, 4 ; anaemia, 1 ; cardiac disease, 2 ; chronic otitis media, 4 ; dermatitis, 1 ; erythema nodosum, 1 ; hernia, 1 ; ichthyosis, 1 ; nephritis, 3 ; psoriasis, 1 ; rhinitis, 6 ; scabies, 2 ; septic finger, 1 ; threadworms, 1 ; tubercular spine, 1 ; vaginitis, 5.

MIXED INFECTIONS.—Chickenpox, 1 ; whooping cough, 1. No cross infection occurred.

ANTITOXIN.—In 24, or 7·7 per cent., serum had been given before admission to hospital. The two following tables show the average doses of serum given in hospital as compared with 1936, and the route of administration with serum after-effects for the year under review :—

	1937.	1936.
Average dose of serum—all cases,	29,500 units.	19,100 units.
Do., do., recovered cases,	23,200 „	16,100 „
Do., do., fatal cases,	141,700 „	70,300 „

SERUM AFTER-EFFECTS.									
Route of Administration of Serum.	No.	Urticaria.	Erythema.	Urticaria and Erythema.	Scarlatina form.	Erythema and Morbilli form.	Rigors.	Joint Pains.	
Muscle, ... ..	242	52	—	—	1	—	1	1	
Vein and Muscle, ...	30	10	2	1	—	—	2	—	
Vein, ... ..	5	—	—	—	—	1	—	—	
Vein and peritoneum,	1	—	—	—	—	—	—	—	
Muscle and peritoneum,	4	1	—	—	—	—	—	—	
Peritoneum, ... ..	1	—	—	—	—	—	—	—	
Vein, muscle and peritoneum, ...	5	—	—	—	—	—	—	—	
Total, ... ..	288	63	2	1	1	1	3	1	

Sixty-eight, or 23·6 per cent., developed serum rashes.

SCARLET FEVER ANTITOXIN.—In addition to diphtheria antitoxin, 37 patients had, on an average, 7,000 units of scarlet fever serum. In 8 instances urticarial rashes were noted.

CORRECTED DIAGNOSES.—218, or 41·2 per cent., of the cases discharged were wrongly diagnosed:—Cold, 1; conjunctivitis, 1; enteritis, 2; impetigo, 1; large tonsils, 2; laryngitis, 6; measles, 2; negative, 40; otitis media, 2; pneumonia, 1; positive swab, 51; retro-pharyngeal abscess, 2; rhinitis, 14; scabies, 1; scarlet fever, 4; septic mouth, 1; septic pharyngitis, 4; septic tonsils, 53; sore throat, 24; tetanus (cephalic), 1; tonsillar abscess, 2; tonsillitis, 3.

VIRULENCE TESTS.—In 74 true cases the organism was tested for virulence; 69 proved avirulent and 5 virulent.

In 32 bacteriological cases without clinical signs 29 were avirulent and 3 virulent.

TYPE OF ORGANISM.—In 3 severe cases, in which the organism was typed, the Gravis variety was present.

FATALITY RATE.—Seventeen, or 5·4 per cent., of the clinical cases were fatal.

FATAL CASES.—Of the 17 fatal cases, 12 were males and 5 females. The average age was 7 years; the average duration of disease prior to admission was 3·3 days; and the average duration of residence in

hospital was 9.5 days. Four patients were admitted moribund, dying within 24 hours. The average amount of serum was 141,700 units. Only 1 patient had serum before admission.

OPERATIVE TREATMENT.—Tracheotomy was performed in 3 cases, 2 recovered and 1 died.

TREATMENT.—In addition to antitoxin, glucose and continuous saline were used in the toxic cases. In septic cases with profuse rhinitis scarlet fever antitoxin is of definite value.

#### DICK TEST.

Diphtheria cases had the Dick Test performed as a routine, and the susceptibles were immunised. Of 519 notified cases, 204 were positive. Twenty-four were fully immunised, and 171 were partially immunised against scarlet fever before dismissal.

#### AGE PERIODS.

	1	2	3	4	5	6	7	8	9	10	Over 10	Total.
Positive, ...	—	13	20	25	21	27	22	16	10	11	39	204
Negative, ...	4	9	9	16	21	21	18	30	19	21	147	315
Total, ...	4	22	29	41	42	48	40	46	29	32	186	519

#### ENTERIC GROUP.

At the beginning of the year 3 patients were in residence, and 6 were notified as enteric fever during the year. The diagnosis was revised in 7, and 1 other proved to be a case of enteric fever. The 3 patients recovered.

Two female adults were true typhoid infection of moderate severity. They were both treated with typhoid serum (Felix) with no appreciable effect.

The other was an adult female infected with paratyphoid B. The course was mild and of short duration.

### PUERPERAL SEPSIS.

At the beginning of the year 18 patients were in residence, 117 were admitted as puerperal sepsis or pyrexia, and in 23 the diagnosis was revised. Of these 112 cases, 91 recovered, 8 died, and 13 were in hospital at the end of the year.

TYPE OF DISEASE.—Mild, 51 ; moderate, 28 ; severe, 20.

Of the 99 cases, the infection was localised in the uterus in 68 ; 21 were septicaemic ; 8 thrombosis of veins, 1 pelvic cellulitis, and 1 peritonitis.

THE AVERAGE AGE of the patients was 29·3 years ; 7 were under 20 years of age, 22 between 21 and 25 years, 27 between 26 and 30 years, 27 between 31 and 35 years, 10 between 36 and 40 years, and 6 were over 40 years of age.

THE AVERAGE DURATION OF ILLNESS of all cases prior to admission was 4 days ; of recovered cases, 4·1 days ; and of fatal cases, 2·8 days.

THE AVERAGE DURATION OF RESIDENCE was 39·3 days ; of recovered cases, 41·5 days ; and of fatal cases, 14·8 days.

ATTENDANCE AT BIRTH.—Doctor, 6 ; midwife, 23 ; doctor and midwife, 41 ; hospital cases, 25 ; nil, 4.

### HOSPITAL AND OTHER AUTHORITY CASES.

	Hospital Cases.			Other Authorities.		
	Recovered.	Died.	Total.	Recovered.	Died.	Total.
Airdrie, ...	5	1	6	6	2	8
Bellshill (County),	13	2	15	—	—	—
Coatbridge, ...	—	—	—	12	1	13
Hamilton, ...	2	—	2	6	—	6
Nursing Home, ...	2	—	2	—	—	—
Total, ...	22	3	25	24	3	27

*Note.*—Bellshill is the County Maternity Hospital. Two cases from a Nursing Home were County of Lanark patients. Four Coatbridge Burgh cases were sent from Airdrie Maternity Hospital.

COUNTY OF LANARK CASES.—72. 67 recovered, 5 died. These figures include the cases from the County Maternity Hospital, Bellshill.

THE FATALITY RATE was 8·08 per cent. In the hospital cases it was 12 per cent., in cases delivered at home 6·7 per cent., and in cases following abortion 28·5 per cent.

COMPLICATIONS AT BIRTH.—Abnormal tearing, 29; abortion, 7; breech, 5; Caesarian section, 1; craniotomy, 1; induction of labour, 3; instrumental delivery, 33; macerated foetus, 1; miscarriage, 1; placenta praevia, 1; pre-eclamptic toxæmia, 1; prematurity, 2; retained placenta, 4; retroversion of uterus, 1; still birth, 9; twins, 2.

OTHER CONDITIONS PRESENT AT BIRTH OR ON ADMISSION.—Albuminuria, 1; anaemia, 17; cardiac disease, 1; peritonitis, 1; phlebitis, 2; retention of urine, 2; septic finger, 1; tapeworm, 1; vesical calculus, 1.

NUMBER OF PREGNANCY at which disease occurred :—

Pregnancy.	No of Cases.		Instrumental Delivery.	
	Recovered.	Died.	Recovered.	Died.
1	35	2	17	1
2	15	1	3	—
3	9	—	2	—
4	6	1	1	—
5	5	—	1	—
6	5	—	2	—
7	5	2	2	1
8	5	2	—	1
9	3	—	2	—
10	2	—	—	—
11	1	—	—	—
Total,	91	8	30	3
	99		33	

COMPLICATIONS DURING THE FEVER.—Abscesses, 3; albuminuria, 2; anaemia, 12; arthritis, 1; cystitis, 1; embolism, 1; enteritis, 1; jaundice, 1; myositis, 1; oedema of lungs, 1; pelvic cellulitis, 1; phlegmasia, 8; pleural effusion, 3; pneumonia, 1; pyæmic abscesses, 2; tonsillitis, 1; hæmorrhage, 1.



CORRECTED DIAGNOSES.—Twenty-three, or 18·8 per cent., were wrongly diagnosed :—Abortion, 3 ; anaemia, 3 ; bronchiectasis, 1 (fatal) ; bronchitis, 1 ; lead poisoning, 1 ; mastitis, 6 ; negative, 1 ; pelvic cellulitis, 5 ; phlegmasia, 1 ; tuberculosis, 1.

CONCURRENT INFECTIONS.—Two patients had also mild paratyphoid B. infection.

BLOOD CULTURES.—Of 99 blood cultures taken, 13 were positive—haemolytic streptococci, 5 ; staphylococcus aureus, 3 ; B. coli, 5.

ANAEROBIC CULTURES.—Of 92 anaerobic cultures, 11 were positive—haemolytic streptococci, 7 ; staphylococcus aureus, 2 ; B. coli, 2.

WASSERMANN TEST.—Seventeen were positive, 11 doubtful, and 84 negative.

THROAT CULTURES.—Haemolytic streptococci, 4 ; streptococcus viridans, 2 ; negative, 43. This procedure was discontinued at the middle of the year.

CERVICAL CULTURES.—Swab on admission—haemolytic streptococci, 10 ; streptococcus viridans, 1 ; negative, 88.

POST-PUERPERAL CONDITIONS, arising after a month from confinement, are not included in the true puerperal figures. These were :—Anaemia, 3 ; nephritis, 1 ; pelvic cellulitis, 5 ; phlegmasia, 4 ; suppurative mastitis, 21.

COUNTY MATERNITY HOSPITAL CASES.—Twenty-two patients delivered or treated in the County Maternity Hospital were admitted either directly, or later from their home, after discharge from hospital.

Bellshill Hospital direct, 16 ; Glasgow Royal Infirmary, 1 ; from patients' home, 5.

Disease proved—puerperal sepsis, 13 ; puerperal sepsis and paratyphoid B., 2 ; mastitis, 4 ; nephritis, 1 ; negative, 1 ; bronchiectasis, 1.

TREATMENT.—The general lines of treatment throughout the year were :—Postural drainage aided by intra-uterine injection of glycerine

and proflavine. In toxic cases glucose and saline transfusions were extensively used. In patients suffering from anaemia large doses of iron were used. Thirteen patients suffering from profound anaemia had blood transfusions with good results.

*Sulphanilamide*.—Practically all the cases of puerperal sepsis had prontosil from admission until the sepsis subsided with definitely good results. The death-rate of the proved cases was 8.08 per cent. This figure is the lowest on record for the hospital.

85 patients had, on an average, 64 c.c. of prontosil soluble, with an average dose of 32.5 gm. of prontosil album orally. After-effects were trifling, 8 had cyanosis and 1 erythematous rash.

It cannot be wholly assumed that the low death-rate was the result of the routine administration of sulphanilamide. In dealing with comparatively small numbers, together with the fact that the other streptococcal infections—scarlet fever and erysipelas—were mild throughout the year, it is possible that the type of streptococcus was of a lower virulence than normally.

The occurrence of anaemia as an important clinical factor in puerperal sepsis was demonstrated sufficiently by Dr. D. W. Hendry (County Hospital, Motherwell, Annual Report, 1936), to merit further study.

The type of anaemia met with is the microcytic hypochromic variety and its relation to the active septic process is remarkably constant. The anaemic condition progresses directly as the septic process advances, and it would seem that even massive anti-anaemic therapy has little or no deterrent effect until the sepsis subsides.

Convalescence from puerperal sepsis is slow and the anaemia contributes very considerably to the retardation of recovery. Indeed, it has been found difficult to persuade patients to remain long enough in hospital to achieve a satisfactory blood picture.

During the past year sulphanilamide preparations have been used extensively in the treatment of puerperal sepsis and it is of interest to note whether those drugs have any demonstrable effect on the anaemia associated with the disease. Extracted figures indicate some of the points which have been noted in studying the blood of these patients.

## 1. Degree of anaemia on admission :—

Average erythrocyte count on admission, ...	3,220,000
Average haemoglobin % (Sahli) on admission,	49%
Average colour index on admission, ...	0.7

*Haemoglobin % distribution.*

80-90% Sahli.	2% of cases on admission.		
70-80% "	4%	"	"
60-70% "	26%	"	"
50-60% "	24%	"	"
40-50% "	16%	"	"
30-40% "	18%	"	"
20-30% "	10%	"	"

*Erythrocyte count % distribution.*

Millions per c.mm.

4.5-5	2% of cases on admission.		
4 -4.5	10%	"	"
3.5-4	24%	"	"
3 -3.5	24%	"	"
2.5-3	12%	"	"
2 -2.5	20%	"	"
1.5-2	8%	"	"

*The progress of the anaemia.*

In cases with continued sepsis, patients lose, on the average, 730,000 R.B.C./c.mm. and 13% Hb. during the period of active disease, in spite of massive anti-anaemic therapy. Only on subsidence of the sepsis does a blood gain become evident. In cases where a rapid loss is evident repeated blood transfusion in 400-500 c.c. amounts are used. In one fatal septicaemia blood loss was at a rate of 500,000 R.B.C. per c.mm. per diem.

The acute sepsis having subsided there is found to be a natural tendency to recovery of blood loss, the rate of recovery being minimal at first and gaining greater impetus as time proceeds. Patients gain, on the average, at the rate of 340,000 R.B.C. per c.mm. and 6% Hb. per week.

On dismissal the average blood shows 4,310,000 R.B.C. per c.mm. and 73% Hb., the distribution being as follows :—

*Haemoglobin % distribution.*

80-90% Sahli.	29%	of cases on dismissal.
70-80% „	50%	„ „
60-70% „	19%	„ „
50-60% „	2%	„ „
40-50% „	—	„ „
30-40% „	—	„ „
20-30% „	—	„ „

*Erythrocyte % distribution.*

Millions R.B.C./c.mm.

4.5-5	31%	of cases on dismissal.
4 -4.5	57%	„ „
3.5-4	10%	„ „
3 -3.5	2%	„ „
2.5-3	—	„ „
2 -2.5	—	„ „
1.5-2	—	„ „

Prior to treatment by the sulphanilamide sixteen patients recovering from severe sepsis gained, on the average, 960,000 R.B.C. per c.mm. and 16% Hb. in three weeks.

Using sulphanilamide, sixteen similar cases gained 1,020,000 R.B.C. per c.mm. and 16% Hb. at the same time. It would, therefore, seem that the new anti-streptococcal chemo-therapy does not have a deterrent effect on blood regeneration, but, indeed, by cutting short the period of acute illness, tends to lessen the depth of anaemia, shorten the regeneration requirement, and, ultimately, the duration of stay in hospital.

Blood transfusion is used as a therapeutic measure for anaemia, both with a view to making up actual loss of cells and to provoking a marrow erythroblastic response. The former endeavour is mechanically successful, but the latter is not regularly achieved, and unfortunately occurs in recovery cases rather than in those with progressive destruction of red cells. However, transfusion is found to be of great value,

if only as a temporary measure, and all patients with less than 2,000,000 R.B.C. per c.mm. and 30% Hb. are transfused. This limit was chosen quite arbitrarily.

The average immediate gain from an 800 c.c. citrated blood transfusion is 990,000 R.B.C. per c.mm. and 13% Hb.

### ERYSIPELAS.

Five patients were in hospital at the beginning of the year; 87 were notified as erysipelas; 11 were wrongly diagnosed; and 1 other proved to be a case of erysipelas. Of these 82 patients, 73 were discharged well, 1 died, and 8 were in hospital at the end of the year.

SEX.—Male, 24; female, 50.

TYPE OF DISEASE.—Mild, 46; moderate, 19; severe, 9.

SITUATION OF DISEASE.—Face, 55; face and scalp, 2; face and back, 1; face and legs, 1; breast, 1; arm, 1; legs, 13.

THE AVERAGE AGE was 36·9 years; 1 was under 1 year of age; 9 between 1 and 10 years; 7 between 11 and 20 years; 7 between 21 and 30 years; 11 between 31 and 40 years; 19 between 41 and 50 years; and 20 were over 50 years of age.

THE AVERAGE DAY OF DISEASE was 3·7 days, and the average residence, 19·6 days.

THE FATALITY RATE was 1·3 per cent. The fatal case was a male, aged 68 years, admitted dying from myocarditis and arterio-sclerosis with a mild facial erysipelas.

COMPLICATIONS.—Eleven, or 14·8 per cent., developed one or more complications. These were:—Abscesses, 3; adenitis, 1; bronchitis, 1; enteritis, 1; otitis media, 2; paronychia, 1; relapse, 2; sore throat, 1.

OTHER CONDITIONS PRESENT ON ADMISSION.—Anaemia, 1; arterio-sclerosis, 1; arthritis, 1; burn, 1; cellulitis, 1; chronic otitis media, 1; diabetes mellitus, 1; epilepsy, 1; malnutrition, 1; myocarditis, 1; phlebitis, 1; pregnancy, 1.

CORRECTED DIAGNOSES.—Eleven, or 12·9 per cent., were wrongly diagnosed :—Abscesses, 3 ; cardiac disease, 1 ; cellulitis, 2 ; dermatitis, 1 ; diabetes, 1 ; measles, 1 ; negative, 1 ; styas and conjunctivitis, 1.

RELAPSES.—In 2 instances relapses occurred.

TREATMENT.—As the majority of the cases were mild in character and the organism possibly of low virulence, no conclusions were drawn as to the relative values of the different remedies used. One patient had no treatment, 12 ultra-violet light, 52 ultra-violet light and prontosil, and 9 prontosil or proseptasine. The one fatal case died from cardiac disease and not from erysipelas.

### TUBERCULOSIS.

120 patients were admitted as tuberculosis. In 5 instances, the diagnosis was revised, and 19 others proved to be cases of tuberculosis. Of these 134 cases, 116 were discharged in various stages of improvement, 17 died, and 1 was in hospital at the end of the year.

The following table shows the age-periods and sex of the cases discharged :—

Age.	Recovered.		Died.		Total.	
	Males.	Females.	Males.	Females.	Males.	Females.
— 5 years,	...	—	1	4	3	4
—10 „	...	4	1	—	3	4
—15 „	...	3	2	1	—	4
—20 „	...	3	9	1	3	12
—25 „	...	3	14	—	1	15
—30 „	...	10	18	—	—	10
—35 „	...	16	9	—	1	16
—40 „	...	—	1	—	—	1
Over 40 „	...	12	10	—	—	12
	51	65	6	11	57	76

SEX.—Male, 57 ; female, 76.



THE AVERAGE AGE was 26·3 years, and the average residence 8·9 days.

#### CLASSIFICATION OF CASES.

Pulmonary, 107 (pneumothorax, 90).			
Glandular,	7.	General,	2.
Abdominal,	4.	Osseous,	2.
Articular,	2.	Meningeal,	9.

PULMONARY TUBERCULOSIS—107. 90 represent the re-admissions of 15 pneumothorax cases for induction or refills. Of the other 17 cases, 1 was a tubercular pleural effusion; 3 advanced pulmonary cases; 1 advanced pulmonary disease with perinephritic abscess; 1 for barium meal; and 11 were admitted as other diseases.

GLANDULAR TUBERCULOSIS—7. All the patients had abscess formation and were operated on.

ABDOMINAL TUBERCULOSIS—4. One case was admitted as tubercular peritonitis, and the 3 others came in as other diseases.

ARTICULAR TUBERCULOSIS—2. The joints affected were:—Hip joint, 1; knee joint, 1. Both patients were transferred to Stonehouse Orthopaedic Hospital for further prolonged treatment.

GENERAL TUBERCULOSIS—2. Two babies were notified as cerebro-spinal meningitis.

OSSEOUS TUBERCULOSIS—2. A child, aged 2 years, had tubercular dactylitis. A boy, aged 9 years, was admitted as an acute psoas abscess. The abscess arose from disease of the great trochanter.

MENINGEAL TUBERCULOSIS—9. Males, 3; females, 6. Six were under 10 years of age, and 3 between 11 and 20 years. The average age was 9 years. In 4 of the cases the organism was isolated from the cerebro-spinal fluid. All were fatal.

FATAL CASES—17. Abdominal, 1; general, 2; meningeal, 9; pulmonary, 5.

CORRECTED DIAGNOSES--5. Lymphosarcoma, 1 (fatal); meningococcal meningitis, 1 (fatal); pneumonia, 1 (fatal); septicaemia, 1 (fatal); staphylococcal abscess, 1.

OTHERS WHICH PROVED ON OBSERVATION TO BE TUBERCULOSIS--Appendicitis, 1; continued fever, 1; empyema, 1; enteric fever, 1 gastro-enteritis, 1; meningitis, 5; pneumonia, 6; post-influenzal pyrexia, 1; puerperal fever, 1.

### PNEUMONIA.

Twenty-seven patients were in residence at the beginning of the year, 386 were admitted, in 129 the diagnosis was revised, and 8 others proved to be cases of pneumonia. Of these 292 cases, 178 recovered, 63 died, and 51 were in hospital at the end of the year.

The following table shows the age-periods and the sex of the cases discharged :—

Age.	Recovered.		Died.		Total.		Percentage.	
	M.	F.	M.	F.	M.	F.	of Total.	Deaths.
— 1 year,	6	4	6	4	12	8	8.2	15.8
— 2 years,	10	11	3	4	13	15	11.6	11.1
— 3 „	5	5	1	2	6	7	5.3	4.7
— 4 „	3	7	—	—	3	7	4.1	—
— 5 „	7	4	1	—	8	4	4.9	1.5
6-10 „	18	7	—	2	18	9	11.2	3.1
11-15 „	12	7	—	3	12	10	9.1	4.7
16-20 „	13	2	1	1	14	3	7.0	3.1
21-25 „	8	—	3	—	11	—	4.5	4.7
26-30 „	3	—	1	—	4	—	1.6	1.5
31-35 „	5	5	3	—	8	5	5.3	4.7
36-40 „	10	3	4	3	14	6	8.2	11.1
Over 40 „	16	7	16	5	32	12	18.2	33.3
	116	62	39	24	155	86	—	—

CLASSIFICATION OF DISEASE.—Acute lobar pneumonia, 127 broncho-pneumonia, 107; central pneumonia, 2; convalescent pneumonia, 2; hypostatic pneumonia, 1; influenzal pneumonia, 1; tubercular pneumonia, 1.

TYPE OF DISEASE.—Mild, 72; moderate, 72; severe, 97.

THE SITUATION OF THE LESION in the lobar cases was as follows :—Double, 13. Right side :—Lower lobe, 29; upper lobe, 6; middle lobe, 6; upper and middle, 2; lower and middle, 7; whole, 12. Left side :—Lower lobe, 43; upper lobe, 1; whole, 8.

THE AVERAGE DAY OF DISEASE of all cases on admission was 5·3 days; of recovered cases, 5 days; and of fatal cases, 6·3 days.

THE AVERAGE DURATION OF RESIDENCE of all cases was 27·9 days; of recovered cases, 35·6 days; and of fatal cases, 6·2 days.

THE FATALITY RATE was 26·1 per cent. Eight cases died within 24 hours of admission, and 7 others within 48 hours. In lobar pneumonia the fatality rate was 25·9 per cent.; right side lobar pneumonia, 22·5 per cent.; left side lobar pneumonia, 15·3 per cent.; double lobar pneumonia, 84·6 per cent.; broncho-pneumonia, 26·1 per cent.

COMPLICATIONS.—Forty, or 16·5 per cent., of the discharges developed one or more complications. These were :—Abscesses, 4; adenitis, 3; albuminuria, 2; bacilluria, 1; dermatitis, 3; empyema, 8; enteritis, 1; mesenteric thrombosis, 1; miscarriage, 1; myocarditis, 1; otitis media, 8; parturition, 1; pericarditis, 1; phlebitis, 1; pleural effusion, 3; pleurisy, 1; positive swab (*B. diphtheria*), 1; pulmonary abscess, 1; pyelitis, 1; rhinitis, 3; septic fingers, 2; septic spots, 1; tonsillitis, 3.

CORRECTED DIAGNOSES.—129, or 34·8 per cent., of the cases discharged were wrongly diagnosed :—Acholuric jaundice, 1; arteriosclerosis, 1; asthma, 1; axillary abscess, 1; bronchitis, 46; burn, 1; cardiac disease, 2; cold, 6; constipation, 3; diabetes, 1; diphtheria, 1; eczema, 1; empyema, 7; enteritis, 4; impetigo, 1; influenza, 6; intrathoracic abscess, 1; lymphatic leukaemia, 1; lymphosarcoma, 1; malnutrition, 3; marasmus, 4; measles, 3; negative, 8; nephritis, 1; otitis media, 2; pleural effusion, 5; post-influenzal debility, 1;

pulmonary abscess, 1; pulmonary fibrosis, 3; ruptured spleen, 1; septicaemia (influenzal), 1; septic rhinitis, 1; sore throat, 1; tuberculosis, 6; whooping cough, 2.

CONCURRENT DISEASES.—Whooping cough, 3. One patient incubating chickenpox infected 1 other. In 2 other patients the pneumonia occurred after measles, and in 1 after whooping cough.

OTHER CONDITIONS PRESENT ON ADMISSION.—Albuminuria, 2; anaemia, 3; anthracosis, 1; bronchitis, 1; burn, 3; cancer of mouth, 1; cardiac disease, 2; chronic otitis media, 3; dermatitis, 3; enteritis, 9; Grave's disease, 1; kyphosis, 1; marasmus, 4; motor accident injuries, 1; pleural effusion, 1; pregnancy, 2; scabies, 1; septic scalp, 1.

CASES WHICH PROVED TO BE PNEUMONIA on observation were admitted to hospital as :—Diphtheria, 1; empyema, 1; influenza, 1; meningitis, 3; pleural effusion, 1; tuberculosis, 1.

EMPHYEMA—8. In 8 instances empyema followed the pneumonia. Seven were pneumococcal and 1 streptococcal. In the 7 pneumococcal cases, rib resection, after varying periods of aspiration, was necessary. Five recovered and 2 died. The streptococcal case was fatal.

TYPE OF ORGANISM.—In 15 type I was present, no deaths; in 29 type II, 9 deaths; in 3 fatal cases types I and II were reported; and in 10 type IV, 4 deaths.

TREATMENT.—Pneumonia patients were treated on general lines—rest, nursing, oxygen, and glucose transfusions. Thirty patients were treated with type serum. Twenty-one recovered and 9 died. In 4 the organism was type I, all recovered; in 17 type II, 7 fatal; in 1 types I and II, 1 fatal; in 2 type IV, 1 fatal; and in 6 the type was indefinite. The average day of disease in the serum treated cases was 3.4 days, and the average amount given was 78,000 units. Serum after-effects were noted in 6 patients. These were :—Collapse, 1; joint pains, 4; rigor, 2; urticaria, 2.

### EMPHYEMA.

Two cases were in hospital at the beginning of the year, and 13 were admitted diagnosed empyema. In 7 the diagnosis was revised, and 9 others proved to be cases of empyema. Of those 17 patients, 12 were discharged well, 3 died, and 2 were in hospital at the end of the year.

SEX.—Male, 5 ; female, 10.

THE AVERAGE AGE was 25·5 years, and the average residence in hospital, 48·4 days.

TYPE OF INFECTION.—Pneumococcal, 7 ; streptococcal, 3 ; staphylococcus aureus, 3 ; streptococcal and staphylococcal, 1 ; staphylococcal and coliform, 1.

In 2 of the pneumococcal cases the organism was type IV.

In 9 rib resection was necessary after repeated aspiration ; 3 were drained through an intercostal space ; 2 cleared up with aspiration ; and 1 was a case with a discharging sinus.

FATAL CASES.—Staphylococcus aureus, 1 ; streptococcal, 2.

CORRECTED DIAGNOSES.—Pleural effusion, 2 ; pleural thickening, 2 ; pulmonary fibrosis, 1 ; pneumonia, 1 ; pulmonary tuberculosis, 1.

OTHERS WHICH PROVED TO BE EMPYEMA.—Pleurisy, 2 ; pneumonia, 7.

### MENINGITIS.

Two patients were in hospital at the beginning of the year, and 35 were notified as meningitis. The diagnosis was revised in 29, and 1 other proved to be a case of meningitis. Of those 9 patients, 3 recovered, 5 died, and 1 was in hospital at the end of the year.

CEREBRO-SPINAL FEVER.—Of the 5 proved cases, 3 were fatal.

The average day of disease was 4·2 days, and the average residence 15·2 days.

The average age was 11·6 years ; 3 were under 10 years of age ; 20 years, 1 ; 25 years, 1.

TREATMENT.—The average amount of serum administered was 168 c.c., or 56,000 units, by the cisternal, intravenous, and intraperitoneal routes.

FATAL CASES.—The 3 fatal cases died within 48 hours of admission.

**PNEUMOCOCCAL MENINGITIS.**—One child and 1 adult died from pneumococcal meningitis. Both were moribund on admission. The average day of disease was 2·5 days. In one instance the organism was type II and in the other type IV. Both had large doses of pneumococcal serum.

**HAEMORRHAGIC MENINGITIS.**—A male, aged 23 years, was admitted on the second day of illness with a haemorrhagic meningitis. He was discharged well after 66 days residence in hospital.

**CORRECTED DIAGNOSES.**—Cerebral haemorrhage, 1 (fatal); constipation, 1; enteritis, 10 (2 fatal); epilepsy, 1; hemiplegia, 1; influenza, 1; malnutrition, 1; negative, 1; optic atrophy, 1; otitis media, 2; pneumonia, 3; sore throat, 1; tuberculosis, 5.

### MEASLES.

Three patients were admitted and 7 others proved to be cases of measles. Of those 10 cases, 8 recovered, 1 died, and 1 was in hospital at the end of the year.

**SEX.**—Male, 3; female, 6.

**TYPE.**—Mild, 3; moderate, 3; severe, 3.

**THE AVERAGE DAY OF DISEASE** was 4·6 days; the average age, 6·4 years; and the average residence, 25·5 days.

**FATAL CASE.**—A child, aged 1 year, died from haemorrhagic measles.

**COMPLICATIONS.**—Bronchitis, 1; enteritis, 1; laryngitis, 1.

**CONDITIONS PRESENT ON ADMISSION.**—Chickenpox, 1; dacryocystitis, 1; enteritis, 1; laryngitis, 2; marasmus, 1.

**OTHERS WHICH PROVED TO BE MEASLES.**—Diphtheria, 2; erysipelas, 1; pneumonia, 3; scarlet fever, 1.

### WHOOPIING COUGH.

Fourteen patients were notified as whooping cough and 5 others as some other disease. Of those 19 patients, 17 recovered, 1 died, and 1 was in hospital at the end of the year.

**SEX.**—Male, 8; female, 10.



THE AVERAGE DAY OF DISEASE was 13·5 days ; the average age, 6·8 years ; and the average residence, 41·7 days.

TYPE OF DISEASE.—Mild, 8 ; moderate, 3 ; severe, 7.

FATALITY RATE.—One, or 5·5 per cent., was fatal. A male child, aged 2 years, died from broncho-pneumonia and marasmus.

COMPLICATIONS.—Abscesses, 2 ; broncho-pneumonia, 1 ; enteritis, 1 ; otitis media, 3 ; rhinitis, 1.

OTHER CONDITIONS PRESENT ON ADMISSION.—Bronchitis, 1 ; broncho-pneumonia, 1 ; extroversion of bladder, 1 ; marasmus, 1 ; pregnancy, 1 ; septic sores, 1.

OTHERS WHICH PROVED TO BE WHOOPING COUGH.—Pneumonia, 2 ; scarlet fever, 3.

### SEPTICAEMIA.

In addition to puerperal septicaemia, 7 patients, notified as other diseases, suffered from septicaemia. Of the 7 cases, 2 recovered.

Male, aged 19 years, notified pneumonia, died from influenzal septicaemia.

Female, aged 15 years, notified scarlet fever, died from coliform septicaemia. This patient was treated with large doses of prontosil without result.

Male, aged 28 years, notified tubercular meningitis, died from coliform septicaemia. He was treated with intravenous acriflavine.

Male, aged 58 years, had a streptococcal septicaemia. Treatment with prontosil resulted in recovery.

Male, aged 45 years, notified as pleurisy, died from clinical septicaemia following an old empyema.

Male, aged 40 years, notified endocarditis, died from streptococcal septicaemia. Large doses of prontosil were used.

Male, aged 14 years, notified scarlet fever, recovered from a severe septicaemia of the viridans type after treatment with streptococcal antitoxin and prontosil.

### DIABETES.

The establishment of a diabetic clinic in the outdoor department of the hospital necessitated the admission of a number of diabetic cases to stabilise their diet and for other reasons.

In all, 17 patients were admitted for this purpose, and 2 others came in notified as erysipelas and pneumonia. Fourteen were discharged improved, 4 died, and 1 was in hospital at the end of the year.

SEX.—Male, 7 ; female, 11.

The average age was 50·5 years, and the average residence, 22·2 days.

FATAL CASES.—All 4 fatal cases were females. Two died from diabetic gangrene, 1 from pyaemia, and 1 from myocarditis and secondary cellulitis.

### VENEREAL DISEASES.

At the beginning of the year 6 cases were in residence. Throughout the year 113 patients were admitted for indoor treatment. Of these, 43 were wrongly diagnosed. Of the 76 proved cases, 67 were discharged in varying stages of improvement, 6 died, and 3 were in hospital at the end of the year.

SEX.—Male, 52 ; female, 21.

AGE.—Under 1 year, 8 ; 11 to 20 years, 5 ; 21 to 30 years, 30 ; 31 to 40 years, 10 ; 41 to 50 years, 12 ; over 50 years, 8.

The average age of the proved cases was 28·5 years, and the average duration of residence, 26·2 days.

The indoor cases were :—Syphilis, 30 (congenital, 6) ; gonorrhoea, 25 ; syphilis and gonorrhoea, 4 ; gonorrhoeal arthritis, 4 ; gonorrhoeal warts, 1 ; septic balanitis, 3 ; gonococcal ophthalmia, 6.

CORRECTED DIAGNOSES.—Forty-three, or 37 per cent., were wrongly diagnosed :—Blepharitis, 1 ; conjunctivitis, 1 ; dermatitis, 2 ; epithelioma of penis, 1 ; epithelioma of tongue, 1 ; inguinal abscess, 1 ; negative, 6 ; septic ulcers, 3 ; septic spots, 1 ; simple ophthalmia, 16 ; traumatic epididymitis, 1 ; vaginitis, 6 ; with baby, 3.

COMPLICATIONS AND REASONS FOR INDOOR TREATMENT.—Abscess of knee, 1; anaemia, 1; ascites, 1; balanitis, 1; cerebral tumour, 1; Charcot's joint, 1; corneal ulceration, 1; dermatitis, 3; epididymitis, 14; furunculosis, 1; general paralysis of insane, 1; hernia, 1; inguinal abscess, 1; jaundice, 1; keratitis, 3; mental deficiency, 1; pachymeningitis, 1; paraphimosis, 2; peri-urethral abscess, 3; phagadaenic ulceration, 1; phimosis, 8; popliteal aneurysm, 1; pregnancy, 1; pyelitis, 1; retention of urine, 2; salpingitis, 2; scabies, 1; sinus of penis, 2; ulceration of legs, 1.

OPHTHALMIA NEONATORUM.—Of 22 cases notified as ophthalmia neonatorum, 6 were gonococcal in origin. In 2 the infection was mild, 2 moderate, and 2 severe. In 1 severe case with ulceration recovery without loss of vision resulted.

COUNTY MATERNITY HOSPITAL CASES.—Of 8 babies notified as ophthalmia neonatorum, 1 was gonococcal, 5 simple ophthalmias, 1 blepharitis, and 1 septic spots. One child had congenital syphilis, and another notified pemphigus proved negative. Of 7 adults, 2 were syphilis, 3 had gonorrhoea, and 2 were negative.

FATAL CASES.—6. These were :—Congenital syphilis, 3; late syphilis, 3. All were males.

The number and nature of the cases attending at the outdoor clinic and the areas from which they came are shown in the following table. 277 new cases were registered :—210 males and 67 females.

#### VENEREAL DISEASES, 1937.

	Syphilis.	Gonorrhoea.	Syphilis and Gonorrhoea.	Soft Sore.	Others V. D.	Others Non V. D.	Total.	Indoor Cases.	Indoor Days.	Outdoor Attendances.
County of										
Lanark,	57	115	7	1	12	81	273	89	1,974	4,114
Airdrie,	1	—	—	—	—	3	4	2	31	1
Coatbridge,	1	5	—	—	—	—	6	3	162	19
Hamilton,	10	17	—	1	3	4	35	5	127	864
Motherwell										
& Wishaw,	24	56	1	—	—	13	94	17	343	2,082
Rutherglen,	1	—	—	—	—	—	1	—	—	9
Total, ...	94	193	8	2	15	101	413	116	2,637	7,089

The following is a synopsis of the venereal diseases work since 1930 :—

	1930		1931		1932		1933		1934		1935		1936		1937	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<i>New Cases :—</i>	227	67	193	86	141	88	153	58	186	83	191	63	206	59	210	67
Syphilis, ...	46	16	33	26	29	17	22	16	31	21	20	12	25	15	26	11
Gonorrhoea, ...	107	25	92	32	67	34	77	19	99	24	95	11	109	13	107	18
Syphilis and Gonorrhoea, ...	6	9	5	5	—	—	3	1	3	3	3	2	2	1	2	1
Soft Sore, ...	—	—	4	—	1	—	—	—	1	—	—	—	—	—	2	—
Others V.D., ...	10	1	14	2	4	—	2	—	6	—	5	—	12	—	14	—
Others Non V.D.,	58	16	45	21	40	37	49	22	46	35	68	38	58	30	59	37
<i>Cases treated during Year :—</i>																
Syphilis, ...	102	42	90	49	78	39	115	65	69	42	60	42	77	39	66	28
Gonorrhoea, ...	142	39	135	46	104	46	108	26	135	33	150	22	192	25	167	26
Syphilis and Gonorrhoea, ...	10	11	8	7	4	3	3	1	6	3	7	5	6	2	5	3
Soft Sore, ...	1	—	4	—	1	—	—	—	1	—	1	—	—	—	2	—
Others V.D., ...	11	1	14	2	4	—	3	—	6	—	8	—	13	—	15	—
Others Non V.D.,	55	20	46	22	40	39	51	25	55	37	71	43	60	31	62	39
Outdoor Attend- ances, ...	4056	1218	3808	815	2555	544	3153	502	4143	745	5296	502	5552	661	6582	507
Indoor Cases, ...	70	56	55	52	54	75	47	52	71	69	49	61	57	51	66	50
Indoor Days, ...	1665	1672	1111	1694	1598	2168	1226	1376	1705	2260	1351	1664	1677	1207	1558	1079
Salvarsan Sub- stitute Injections,	1716	655	1377	764	1241	615	922	495	1185	670	1153	502	1160	401	1008	411
No. of Operations, $\frac{1}{2}$	18	1	9	1	5	3	13	3	23	3	10	5	6	1	16	2
„ Wassermann,	284	89	281	116	259	97	297	118	282	113	198	108	183	82	205	112
„ Smears Spiro- chaetes, ...	3	—	—	—	2	—	5	—	11	—	7	—	3	—	19	—
„ „ Gonococci,	116	89	116	76	107	82	101	62	165	117	148	155	155	146	154	118

*Note.*—Included under Salvarsan Substitute Injections are 769 Bismuth Injections.

## LABORATORY WORK.

The following table shows the number of specimens examined during the year by the County Laboratory and the Hospital Laboratory.

	County Laboratory.	Hospital Laboratory.	Total.
Throat and nose swabs (B. diphtheria),	5,081	1,461	6,542
Swabs for virulence, ... ..	134	—	134
Agglutinations (enteric), ... ..	45	12	57
Blood cultures (enteric), ... ..	11	—	11
Urines (enteric), ... ..	13	—	13
Faeces (enteric, etc.), ... ..	26	83	109
Blood cultures (haem. streptococci, etc.),	240	34	274
Cervical swabs (puerperal), ... ..	118	105	223
Blood counts, ... ..	—	445	445
Cerebro-spinal fluid, ... ..	38	39	77
Throat swabs (haem. streptococci, etc.),	1,442	91	1,533
Sputa, ... ..	175	179	354
Miscellaneous, ... ..	132	17	149
Pleural effusion, ... ..	45	54	99
Wassermann, ... ..	506	—	506
Cultures, etc. (gonorrhoea), ... ..	63	—	63
Urethral and cervical smears (gonorrhoea),	—	198	198
Eye smears (gonorrhoea), ... ..	—	25	25
Pus, ... ..	90	104	194
Estimation of blood sugar, ... ..	—	9	9
Urine (cultures, etc.), ... ..	14	105	119
Tinea, ... ..	1	—	1
Pathological specimens, ... ..	45	1	46
Total, ... ..	8,219	2,962	11,181

## MISCELLANEOUS CASES DISCHARGED DURING 1937.

REC. DIED.				REC. DIED.			
Abscesses, ...	...	8	—	Lymphangitis, ...	...	1	—
Anaemia, ...	...	1	—	Lymphosarcoma, ...	...	—	2
Arterio-sclerosis, ...	...	1	1	Marasmus, ...	...	—	1
Arthritis, ...	...	3	—	Mastitis, ...	...	2	—
Asthma, ...	...	—	1	Negative, ...	...	7	—
Bronchiectasis, ...	...	—	1	Nephritis, ...	...	—	1
Bronchitis, ...	...	3	2	Others, ...	...	8	—
Cardiac disease, ...	...	1	2	Otitis media, ...	...	1	—
Catarrhal jaundice, ...	...	1	—	Osteomyelitis, ...	...	1	—
Cellulitis, ...	...	3	—	Pleural effusion, ...	...	7	—
Cerebral haemorrhage, ...	...	—	1	Pleural thickening, ...	...	2	—
Chickenpox, ...	...	4	—	Pleurisy, ...	...	1	—
Chorea, ...	...	2	—	Pulmonary abscess, ...	...	—	1
Cold, ...	...	4	—	Pyelitis, ...	...	1	—
Conjunctivitis, ...	...	1	—	Rheumatism, ...	...	7	—
Constipation, ...	...	1	—	Rhinitis, ...	...	5	—
Dermatitis, ...	...	8	—	Rupture of spleen, ...	...	—	1
Diarrhoea (Sonne), ...	...	5	—	Sacro-iliac disease, ...	...	—	1
Diplopia, ...	...	1	—	Scabies, ...	...	16	—
Dysentery (Flexner), ...	...	1	—	Septic finger, ...	...	4	—
Eczema, ...	...	2	—	Septic toe, ...	...	1	—
Enteritis, ...	...	5	2	Septic tonsils, ...	...	5	—
Erythema, ...	...	2	—	Sore throat, ...	...	9	—
Hydronephrosis, ...	...	1	—	Sprains, ...	...	2	—
Impetigo, ...	...	2	—	Supp. adenitis, ...	...	11	—
Influenza, ...	...	2	—	Synovitis, ...	...	2	—
Laryngitis, ...	...	1	—	Tetanus (cephalic), ...	...	—	1
Leukaemia, ...	...	1	—	Tinea, ...	...	3	—

## ELECTRICAL DEPARTMENT.

During the year 1,714 cases were photographed. These were:—Chest, 1,562; chest and abdomen, 5; chest and spine, 4; chest and sternum, 1; abdomen, 5; pelvis, 8; mastoid, 2; skull, 2; spine, 4; spine and pelvis, 3; bones (disease), 20; bones (injury), 89; kidneys, 1; urinary tract, 4; urinary tract (pyelogram), 1; barium enema, 1; barium meal, 2.



The sources from which the 1,714 cases came were as follows :—

Centres and Dispensaries.				Institutions, etc.	
Airdrie, ... ..	4	County Hosp., Motherwell,	524		
Baillieston, ... ..	25	Bellshill Hospital, ... ..	12		
Bellshill, ... ..	189	Hartwood Mental Hosp., ...	2		
Blantyre, ... ..	70	Kirklands Mental Hosp., ...	1		
Cadzow, ... ..	11	Lanark Hospital, ... ..	5		
Cambuslang, ... ..	49	Lightburn Hospital, ... ..	6		
Chapelhall, ... ..	3	Calderbank House, ... ..	3		
Larkhall, ... ..	40	Roadmeetings Hospital, ...	108		
Lesmahagow, ... ..	1	Longriggend Sanatorium, ...	106		
Newarthill, ... ..	1	Shotts Sanatorium, ... ..	121		
Newmains, ... ..	3	Airdrie Burgh, ... ..	21		
Shotts, ... ..	78	Hamilton Burgh, ... ..	4		
Strathaven, ... ..	1	Medical Practitioners, ...	125		
L'shire Orthopaedic Clinic,	75	Public Health Department,	122		
		School Medical Officer, ...	3		
		V.D. Centre, ... ..	1		

### OPERATIONS.

During the year the following operations were performed in the hospital :—

DISEASE.		OPERATION.	RECOVERED.	DIED.	TOTAL.
Scarlet Fever	Abscesses	Opening	10	—	10
	Boils	Incision	1	—	1
	Bursitis	Opening	1	—	1
	Dacryocystitis	Opening	2	—	2
	Enlarged tonsils	Tonsillectomy	2	—	2
	Mastoiditis	Mastoidectomy	3	—	3
		Scraping sinus	1	—	1
	Septic finger	Incision	3	—	3
	Supp. adenitis	Incision	7	—	7
Diphtheria	Laryngeal stenosis	Tracheotomy	2	1	3
	Septic finger	Incision	2	—	2
	Abscesses	Opening	2	—	2
	Splinter	Removal	1	—	1
	Supp. adenitis	Incision	1	—	1

DISEASE.		OPERATION.	RECOVERED, DIED, TOTAL.		
Puerperal Sepsis	Pelvic cellulitis	Laparotomy	—	1	1
	Abscesses	Opening	2	3	5
	Pelvic abscess	Incision	1	—	1
	Vesical calculus	Crushing	1	—	1
	Endometritis	Curetting	1	—	1
	Peritonitis	Laparotomy	1	—	1
Erysipelas	Abscesses	Opening	3	—	3
	Cellulitis	Incision	1	—	1
Tuberculosis	Dactylitis	Incision	1	—	1
	Gland abscess	Opening	7	—	7
	Perinephritic abscess	Incision	—	1	1
Pneumonia	Empyema	Rib resection	5	2	7
	Abscesses	Opening	6	1	7
	Mesenteric thrombosis	Laparotomy	—	1	1
Measles	Dacryocystitis	Opening	2	—	2
Whooping Cough	Abscesses	Opening	2	—	2
Venereal Diseases	Sinus of penis	Opening	2	—	2
	Abscesses	Opening	6	2	8
	Phimosis	Circumcision	6	—	6
	Paraphimosis	Dorsal slit	2	—	2
	Condylomata	Excision	1	—	1
Others	Abscesses	Opening	42	3	45
	Splinter	Removal	1	—	1
	Laryngitis	Tracheotomy	1	—	1
	Cellulitis	Incision	5	—	5
	Mastitis	Opening	21	—	21
	Empyema	Rib resection	7	2	9
		Tube inserted	2	1	3
	Dacryocystitis	Opening	1	—	1
	Septic finger	Incision	10	—	10
	Pulmonary abscess	Rib resection	—	1	1
	Ischio-rectal abscess	Incision	1	—	1
	Septic arthritis	Arthrectomy	2	—	2
	Tinea	Scraping	1	—	1
	Retro-pharyngeal abscess				
		Incision	2	—	2
	Supp. adenitis	Incision	8	—	8
	Osteomyelitis	Incision	1	—	1
	Septicaemia	Opening empyema	—	1	1
			193	20	213

In addition, there were 218 aspirations, 89 lumbar or cisternal punctures, 100 pneumothorax refills, and 18 blood transfusions.

The following operations and consultations were undertaken by the consulting staff :—

Consulting Surgeon :—Osteomyelitis—incision, 1 ; crushing vesical calculus, 1 ; consultations, 5.

Consulting Gynaecologist.—Laparotomy, 1 ; consultation, 1.

Consulting Ophthalmologist.—Eye examinations, 9.

Consulting Physician.—Consultations, 3.

### THE STAFF.

On 31st December, 1937, the indoor staff comprised 1 physician-superintendent, 2 assistant medical officers, 1 matron, 12 sisters, 62 probationers, and 36 maids.

The outdoor staff consisted of 1 engineer, 3 firemen, 1 gardener, 5 assistant gardeners, 2 chauffeurs, 1 V.D. attendant, 2 X-ray attendants, 2 clerks, 1 telephone operator, and 1 storekeeper.

The total staff numbered 133.

LECTURES.—From October till April, lectures and demonstrations on elementary anatomy and physiology, hygiene, fevers, the theory and practice of nursing, and medical and surgical nursing, in accordance with the syllabus of the General Nursing Council, were given by the medical staff and matron. The course in cooking and dietetics was given by the Education Authority.

Thirteen probationers passed the final examination and were granted the General Nursing Council Certificate for Fever Nursing, whilst 12 others completed the primary examination under this scheme. Twenty probationers were awarded cookery certificates by the Education Authority.

STAFF ILLNESSES.—Forty-five probationers and 8 maids were warded for the following illnesses:—Abscesses, 5; adenitis, 1; arthritis, 1; boils, 1; bursitis, 1; catarrhal jaundice, 1; cellulitis, 1; cold, 4; conjunctivitis, 1; dermatitis, 4; diarrhoea, 2; diphtheria, 3; erythema, 2; influenza, 1; laryngitis, 1; lymphangitis, 1; negative, 1; rhinitis, 3; septic fingers, 5; septic toe, 1; sore throat, 7; sprains, 3; synovitis, 1; tonsillitis, 1; urticaria, 1.

The sick staff lost 686 working days.

INOCULATIONS.—Twenty-one probationers were vaccinated with T.A.B. vaccine against the enteric group of diseases.

IMMUNISATION.—Of 134 Schick Tests, 34 were positive, and, of these, 29 were immunised. Three probationers developed diphtheria. One was Schick positive in October, 1935, and had 3.5 c.c. of toxoid-antitoxin floccules. On re-testing three months later, she was Schick negative. The test was repeated in October, 1936, and was again negative. Another probationer was Schick positive in August, 1936, and had 1.2 c.c. of alum precipitated toxoid. She was re-tested in October, 1936, and January, 1937. Both were negative. The third nurse was Schick negative.

Of 143 Dick Tests, 12 were positive, and 11 were immunised. No member of the staff developed scarlet fever.

X-RAY EXAMINATION OF PROBATIONERS.—Thirty-eight members of the staff had an X-ray picture of the chest taken on taking up duty.

#### AMBULANCE WORK.

		Ad- missions.	Dis- charges.	Tuber- culosis.	Disin- fections.	Others.	Total.
Patients,	...	1,873	986	467	—	53	3,379
Journeys,	...	1,627	279	175	31	128	2,240
Mileages,	...	24,424	8,181	5,918	343	2,165	41,031



TABLE II.—ADMISSIONS AND DISCHARGES IN EACH MONTH OF THE YEAR 1937.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Admitted, ...	248	202	175	190	190	153	130	166	208	203	194	211	2,270
Discharged— Recovered, ...	200	207	183	171	200	174	139	112	170	176	193	198	2,123
Died, ...	21	20	16	7	17	8	9	11	10	7	10	14	150

TABLE III.—AGE AND SEX OF PATIENTS DISCHARGED DURING THE YEAR 1937, WITH THE FATALITY RATE.

## SCARLET FEVER.

Age.	Male.			Female.			Total.		
	Recovered.	Died.	Fatality per cent.	Recovered.	Died.	Fatality per cent.	Recovered.	Died.	Fatality per cent.
0-1, ...	1	—	—	1	—	—	2	—	—
— 2, ...	10	—	—	15	—	—	25	—	—
— 3, ...	26	—	—	14	—	—	40	—	—
— 4, ...	26	—	—	24	—	—	50	—	—
— 5, ...	32	—	—	24	—	—	56	—	—
— 6, ...	30	—	—	30	—	—	60	—	—
— 7, ...	16	—	—	33	—	—	49	—	—
— 8, ...	18	—	—	26	—	—	44	—	—
— 9, ...	20	—	—	20	—	—	40	—	—
— 10, ...	11	—	—	18	—	—	29	—	—
— 15, ...	26	—	—	54	—	—	80	—	—
— 20, ...	7	—	—	19	—	—	26	—	—
Over 20, ...	14	—	—	33	—	—	47	—	—
Total, ...	237	—	—	311	—	—	548	—	—



TABLE III (*contd.*).—DIPHTHERIA.

Age.	Male.			Female.			Total		
	Recovered.	Died.	Fatality per cent.	Recovered.	Died.	Fatality per cent.	Recovered.	Died.	Fatality per cent.
0-1, ...	—	—	—	1	—	—	1	—	—
— 2, ...	2	—	—	1	—	—	3	—	—
— 3, ...	9	1	10.0	5	—	—	14	1	16.6
— 4, ...	8	1	11.1	8	—	—	16	1	5.8
— 5, ...	10	1	9.0	8	—	—	18	1	5.2
— 6, ...	4	3	42.8	17	—	—	21	3	12.5
— 7, ...	16	2	11.1	19	3	13.6	35	5	12.5
— 8, ...	8	2	20.0	13	1	7.1	21	3	12.5
— 9, ...	12	1	7.6	13	—	—	25	1	3.8
— 10, ...	8	1	11.1	10	—	—	18	1	5.2
— 20, ...	33	—	—	63	1	1.5	96	1	1.0
Over 20, ...	7	—	—	19	—	—	26	—	—
Total, ...	117	12	9.3	177	5	2.7	294	17	5.4

TABLE IV.—THE STAGE OF THE DISEASE IN WHICH PATIENTS DISCHARGED IN 1937 WERE ADMITTED TO HOSPITAL.

Disease.	Days of 1st Week.							Week of Illness.				Total.
	1	2	3	4	5	6	7	1st.	2nd.	3rd.	4th	
Scarlet Fever, ...	45	242	135	71	23	10	5	531	11	5	1	548
Diphtheria, ...	21	95	78	52	39	10	7	302	8	1	—	311
Pneumonia, ...	—	26	47	57	37	21	15	203	27	11	—	241

TABLE V.—COMPLICATIONS OBSERVED IN PATIENTS DISCHARGED DURING 1937.

Scarlet Fever.	Suppurative Cervical Adenitis.	Non-Suppurative Cervical Adenitis.	Otitis Media. Purulenta.	Rhinorrhoea.	Cardiac Complications.	Nephritis.	Arthritis.	Mastoiditis.	Pulmonary Complications.	Skin Conditions.	Others.
In 548 Recovered Cases,	7	99	34	49	4	11	11	3	1	4	95
In — Fatal Cases, ...	—	—	—	—	—	—	—	—	—	—	—
In 548 Cases, ...	7	99	34	49	4	11	11	3	1	4	95
Percentage, ...	1.2	18.0	6.2	8.9	0.7	2.0	2.0	0.5	0.1	0.7	17.3

TABLE V (contd.).

Diphtheria.	Adenitis.	Rhinitis.	Otitis Media.	Pneumonia.	Paralysis, all Forms.	Nephritis.	Albuminuria.	Serum Rashes	Others.
In 294 Recovered Cases, ...	8	2	5	—	20	2	28	68	23
In 17 Fatal Cases, ...	—	—	—	—	4	1	1	—	—
In 311 Cases, ...	8	2	5	—	24	3	29	68	23
Percentage, ...	2.5	0.6	1.6	—	7.7	0.9	9.3	21.8	7.3

TABLE VI.—ADMISSIONS (AS NOTIFIED) SINCE OPENING OF HOSPITAL.

Year.	Enteric Fever.	Scarlet Fever.	Diphtheria.	Erysipelas.	Puerperal Fever.	Measles.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Meningitis.	Veneral Diseases.	Tinea.	Pneumonia.	Other Diseases.	Total.
1897	19	70	—	1	—	9	—	—	—	—	—	—	5	104
1898	211	349	12	2	2	13	—	—	—	—	—	—	22	611
1899	235	571	21	5	—	1	—	—	—	—	—	—	16	849
1900	145	638	21	6	2	6	—	—	—	—	—	—	14	832
1901	291	621	31	7	—	—	—	—	—	—	—	—	14	964
1902	160	431	16	12	—	6	—	—	—	—	—	—	86	711
1903	174	187	22	14	1	2	—	—	—	—	—	—	17	417
1904	112	155	53	13	1	3	—	—	—	—	—	—	329	666
1905	300	114	66	12	4	1	23	—	—	—	—	—	93	613
1906	214	283	72	8	2	6	76	—	8	—	—	—	16	685
1907	99	317	283	4	9	2	106	—	94	—	—	—	16	930
1908	131	508	206	14	6	9	53	—	61	—	—	—	23	1,011
1909	109	834	164	11	10	3	1	—	10	—	—	—	9	1,151
1910	148	696	267	16	12	1	27	—	5	—	—	—	15	1,187
1911	122	670	248	16	12	4	—	—	7	—	67	—	47	1,193
1912	106	888	193	11	9	5	5	13	2	—	73	—	47	1,352
1913	126	838	246	12	6	2	16	37	7	2	61	—	15	1,368
1914	108	958	361	20	11	4	11	44	7	5	27	—	13	1,569
1915	115	750	286	25	12	4	18	65	29	4	26	—	30	1,364
1916	95	1,030	251	12	16	1	16	45	17	2	—	—	14	1,499
1917	92	642	191	17	13	22	3	120	26	99	4	—	26	1,255
1918	105	313	241	13	7	29	7	93	14	236	13	—	204	1,275
1919	118	595	280	16	28	24	11	87	24	111	6	—	155	1,455
1920	59	1,128	313	33	39	10	—	107	29	124	5	55	48	1,950
1921	107	1,047	250	38	54	1	—	156	12	123	19	51	50	1,908
1922	49	1,093	234	39	56	12	—	133	12	87	11	124	60	1,910
1923	61	931	254	47	56	7	11	122	9	91	5	87	67	1,748
1924	35	878	295	36	45	38	24	138	8	80	10	133	110	1,830
1925	25	922	285	44	44	5	24	84	2	106	11	123	96	1,771
1926	14	791	406	53	65	33	13	75	4	80	8	197	135	1,874
1927	9	452	419	47	88	11	7	62	5	105	16	259	193	1,673
1928	20	783	571	50	108	70	16	48	17	158	27	290	163	2,321
1929	11	732	643	60	111	4	8	28	10	111	14	347	214	2,293
1930	107	841	699	64	132	17	42	38	5	121	6	386	249	2,707
1931	13	824	555	57	132	22	58	25	5	111	5	383	240	2,430
1932	6	1,207	482	53	159	25	58	9	26	117	7	357	185	2,691
1933	63	1,353	497	81	160	—	63	15	32	99	2	257	163	2,785
1934	14	928	435	83	117	42	117	8	33	141	1	330	178	2,427
1935	48	445	344	57	127	5	130	13	37	108	1	305	191	1,811
1936	28	450	495	79	109	43	125	24	37	108	3	356	179	2,036
1937	6	668	503	87	117	3	96	24	35	113	3	386	229	2,270
	4010	27,931	11,211	1,275	1,882	505	11,655	1,613	629	2,442	431	4,426	3,976	61,496

TABLE VII.—DISCHARGES SINCE OPENING OF HOSPITAL.

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Years.	Enteric Fever.		Scarlet Fever.		Diphtheria.		Erysipelas.		Parapsoral Fever.		Measles.		Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Meningitis.		Venereal Diseases.		Pneumonia.		Typhoid.		Other Diseases.		Total.	
	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.	Reed.	Died.
1897	11	1	43	2	—	—	1	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	2	1	58	5
1898	135	23	296	12	11	—	1	1	—	—	16	4	—	—	—	—	—	—	—	—	—	—	—	—	19	—	498	40
1899	201	24	536	20	15	4	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35	1	810	50
1900	134	14	592	15	16	2	5	—	—	1	7	—	—	—	—	—	—	—	—	—	—	—	—	—	31	3	785	35
1901	209	21	640	22	20	7	8	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	30	—	908	51
1902	183	27	438	20	14	2	10	1	—	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	84	—	738	50
1903	140	24	179	4	15	3	13	2	1	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	12	—	362	33
1904	88	13	171	7	44	9	12	—	1	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	347	5	664	35
1905	241	22	109	5	42	8	12	1	3	1	4	4	21	1	—	—	—	—	—	—	—	—	—	—	108	3	510	45
1906	192	19	241	4	44	11	4	2	—	1	6	—	62	13	—	—	1	5	—	—	—	—	—	—	65	2	615	37
1907	91	9	313	9	192	16	9	1	3	—	2	1	77	19	—	—	28	58	—	—	—	—	—	—	91	6	806	119
1908	107	13	425	8	170	17	12	3	3	2	9	2	55	10	—	—	21	30	—	—	—	—	—	—	56	6	838	91
1909	99	3	781	24	129	16	10	1	8	2	3	—	1	—	—	—	2	4	—	—	—	—	—	—	56	5	1,089	55
1910	117	5	678	16	226	22	13	1	5	8	7	—	28	—	—	—	1	—	—	—	—	—	—	—	52	10	1,127	62
1911	78	11	617	18	232	18	18	—	5	5	3	—	1	1	10	—	1	2	—	—	—	—	—	—	61	—	1,115	7
1912	58	10	748	22	136	15	11	—	3	5	6	—	2	2	4	—	—	1	—	—	—	—	—	—	76	—	1,270	60
1913	87	5	724	15	150	13	10	1	2	4	1	1	11	3	41	5	1	—	—	—	—	—	—	—	61	—	1,316	35
1914	75	10	833	27	228	38	15	4	9	2	2	1	5	4	37	4	1	1	—	—	—	—	—	—	27	—	1,437	102
1915	82	10	641	20	214	29	18	6	9	1	5	3	15	5	47	4	11	9	—	—	—	—	—	—	36	—	1,448	97
1916	82	10	1,017	23	214	27	13	—	8	7	1	—	6	5	63	2	3	5	—	—	—	—	—	—	—	—	84	5
1917	77	14	563	19	185	25	14	1	7	3	20	1	2	1	109	2	6	13	98	—	—	—	—	—	4	—	1,111	11
1918	42	15	269	11	135	18	11	4	3	3	29	7	7	2	83	10	1	4	231	—	—	—	—	—	13	—	1,158	109
1919	82	11	430	12	180	14	13	—	15	10	27	4	7	4	94	3	6	10	104	—	—	—	—	—	6	—	1,285	107
1920	39	3	985	10	191	19	24	4	25	11	16	3	—	—	103	7	1	13	124	33	17	5	—	—	226	18	1,772	105
1921	76	14	997	19	167	22	31	7	41	13	2	—	—	—	136	9	1	4	122	40	8	19	—	—	221	10	1,853	109
1922	29	3	979	18	147	31	31	5	43	14	22	6	—	—	132	10	—	4	66	79	25	11	—	—	249	12	1,788	132
1923	42	3	879	19	186	18	38	4	34	17	5	1	10	1	103	16	1	1	77	45	18	9	—	—	203	10	1,632	111
1924	21	1	818	16	189	18	27	1	35	13	39	11	20	1	111	22	—	10	54	65	25	10	—	—	295	23	1,684	148
1925	14	3	809	16	179	11	39	4	31	14	6	1	20	4	90	7	—	2	93	70	19	11	—	—	297	30	1,650	112
1926	13	2	707	7	237	13	41	7	33	20	39	2	10	3	60	10	1	3	61	114	31	8	—	—	377	35	1,701	135
1927	1	1	465	3	250	7	41	4	56	24	6	1	6	1	47	13	—	6	76	135	41	16	—	—	470	38	1,599	142
1928	12	2	661	5	353	20	40	4	73	31	78	5	13	3	41	15	1	7	114	2	144	52	27	—	577	32	2,134	178
1929	9	1	676	2	325	12	46	6	87	22	14	—	6	2	22	9	6	4	88	197	69	14	—	—	659	40	2,149	169
1930	71	2	757	3	353	21	51	4	92	25	24	8	42	3	17	20	1	4	97	3	217	77	6	—	769	42	2,197	212
1931	7	3	712	2	277	10	36	4	104	21	21	4	58	—	16	10	2	3	76	4	205	71	5	—	681	11	2,200	173
1932	—	—	1,081	10	339	24	45	3	95	18	41	7	53	3	7	12	8	5	75	2	197	57	7	—	597	24	2,542	165
1933	42	—	1,184	7	274	25	54	8	137	22	—	—	79	6	8	16	3	9	57	125	35	2	—	—	607	34	2,672	162
1934	5	—	872	9	258	16	77	5	76	25	41	5	117	—	6	10	6	7	90	187	43	1	—	—	592	41	2,328	163
1935	21	7	397	5	193	15	43	2	80	16	5	2	136	—	3	11	—	12	50	1	160	61	1	—	608	37	1,697	169
1936	17	3	375	5	245	14	59	1	71	10	64	2	132	3	7	15	3	11	55	2	167	38	3	—	605	34	1,803	158
1937	3	—	548	—	294	17	73	1	91	8	8	1	102	5	14	12	3	5	67	6	178	63	3	—	730	32	2,13	150
Total	3,053	362	25,197	491	7,999	627	1,032	105	1,289	379	530	89	1,106	105	1,411	251	120	252	1,875	48	2,333	770	442	—	11,532	705	37,000	4,187
Fatality per cent.	10.6	1.9	8.1	9.2	22.7	19.1	8.6	15.2	67.7	2.4	24.6	—	5.7	6.8														



## LIGHTBURN JOINT-HOSPITAL.

## Annual Report, 1937.

*Physician-Superintendent*—A. W. M. BATTERSBY,  
L.R.C.P. & S.(Ed.), D.P.H.

*Matron*—Miss M. TOWNSEND, R.R.C.

The admissions and discharges during the year, classified according to the disease notified, and to the constituent authority, are shown in Table A and in Table B respectively.

TABLE A.

Disease.		In Hospital, 1st Jany., 1937.	Admitted.	Discharged.		In Hospital, 31st Dec., 1937.
				Recovered.	Died.	
Scarlatina,	...	33	276	264	2	43
Diphtheria,	...	18	120	118	3	17
Pneumonia,	...	14	140	114	24	16
Erysipelas,	...	1	25	22	2	2
Meningitis (Tubercular),	...	—	1	—	1	—
Continued Fever,	...	—	—	—	—	—
* Other Diseases,	...	—	6	3	2	1
Cerebro Spinal Fever,	...	—	2	1	1	—
		66	570	522	35	79

\* Rheumatic endocarditis, 1; pleurisy with effusion, 1; pneumonia and doubtful meningitis, 1; broncho-pneumonia and whooping-cough, 1; nephritis, 1; pleurisy, 1.



TABLE B.

Disease.						County of Lanark.	City of Glasgow.
Scarlatina,	...	...	...	...	...	256	20
Diphtheria,	...	...	...	...	...	118	2
Pneumonia,	...	...	...	...	...	131	9
Erysipelas,	...	...	...	...	...	24	1
Meningitis,	...	...	...	...	...	1	—
Enteric Fever,	...	...	...	...	...	—	—
Other Diseases,	...	...	...	...	...	6	—
Cerebro Spinal Fever,	...	...	...	...	...	2	—
						538	32

### General.

Compared with last year's figures, there was an increase of 86 in the total number of cases admitted, there being an increase in the scarlet fever cases to the extent of 117, and diphtheria 12. Pneumonia cases were decreased by 37, and erysipelas 6 less.

At the commencement of the year there were 66 cases in residence. The number of admissions was 570, making a total of 636 cases. Of these, 522 were discharged well, and 35 died, leaving 79 cases in hospital on 31/12/37.

The fatality rate, calculated on all cases discharged, was 6·7 per cent., a decrease of 4·7 per cent. compared with the rate for 1936 (11·4 per cent.). This figure is based on all cases dying in hospital, including 5 cases which were moribund on admission and survived only a few hours.

The average monthly rate of admission was 48, the lowest number of admissions occurring in August, and the highest number in November, the figures being 32 and 62 respectively.

The average number of patients resident was 62, with an average residence of 42 days.

The highest daily number was 87 (on 14th December), and the lowest daily number was 44 (on 14th August).

**EMERGENCY VISITS.**—There were three.

There were 4 transfers ; Stobhill, 1 ; Shotts, 1 ; Hairmyres, 1 ; Longriggend, 1.

Lack of proper isolation accommodation is still keenly felt and adds difficulties to the administration of the hospital. I feel that the provision of a modern isolation block should receive careful consideration, or the division of an existing Pavilion (glass panels).

Three operations were performed under a general anaesthetic. Seventy-three cases had treatment necessitating local anaesthetics (aspirations, 53 ; abscesses, 13 ; lumbar puncture, 7).

No post-mortem examinations performed.

**X-RAY EXAMINATIONS.**—Six cases were X-rayed at Motherwell.

No cases of laryngeal diphtheria required to have a tracheotomy performed. During the year the consulting physician was called in once, and the surgeon on 2 occasions, and also the consulting aurist on 2 occasions.

**Immunisation and tests (outside cases).**—One case tested ; Immune to scarlet and diphtheria.

### **Scarlet Fever.**

Thirty-three cases of scarlet fever were in hospital at the beginning of the year. The number of cases admitted was 276. In 3 cases the diagnosis was revised. Of the true scarlet cases, 261 were discharged well, 2 died, leaving 43 cases in residence at end of year.

**REMOVAL TO HOSPITAL** was carried out in 95 per cent. of cases in the first week of illness, 4 per cent. in the second week, and 1·0 per cent. in the third week or later. The average duration of disease on admission was 3 days (true cases).

**THE AVERAGE DURATION OF RESIDENCE** of mild cases was 41 days ; of moderate cases, 49 days ; of severe cases, 53 days ; and of fatal cases, 8 days.

REVISED DIAGNOSIS.—Diagnosis revised in 3 cases as follows—2 scarlet fever contacts ; 1 tonsillitis.

TYPE OF DISEASE.—The disease generally was of a moderate type as in 1936. Of cases discharged, 20 per cent. were classified as mild, 79 per cent. as moderate, 1·0 per cent. as severe.

THE FATALITY RATE (calculated on discharges) was 0·76 per cent. Two fatal cases. One died on the 11th day (myocarditis) ; the other died on the 5th day (broncho-pneumonia).

COMPLICATIONS.—109 cases, or 42 per cent. of discharges, developed one or more complications as follows :—

*Adenitis*.—Fifteen cases, or 6·0 per cent. of discharges, had glandular enlargement.

*Otorrhoea*.—Nineteen cases, or 7·0 per cent. developed otitis.

*Rhinitis*.—Thirty-four cases, or 13·0 per cent., developed rhinitis.

*Arthritis*.—Four cases, or 1·5 per cent., developed joint pains.

*Renal Complications*.—(a) 12 cases, or 4·6 per cent., developed albuminuria ; (b) 1 case, or 0·4 per cent., developed nephritis.

*Cardiac Involvement*.—Three cases, or 1·0 per cent., developed endocarditis ; 6 cases, or 2·3 per cent., developed arrhythmia.

*Sepsis*.—Septic fingers, 2 ; boils, 11 ; cervical abscesses, 6 (all incised) ; skin sepsis, 39.

*Other Complications*.—Tonsillitis, 4 ; blepharitis, 3 ; serum rash, 11 ; jaundice, 1 ; acute mastoid, 1 (operation) ; bronchial catarrh, 5. One case relapsed in the sixth week.

ADDITIONAL CONDITIONS ON ADMISSION.—Burn, 6 ; strabismus, 3 ; skin sepsis, 34 ; adenitis, 40 ; nasal discharge, 30 ; bronchitis, 3 ; sycosis, 1 ; ear discharge, 5 ; and endocarditis, 1.

MIXED INFECTIONS (excluding fatal cases).—Clinical diphtheria, 1 ; bacteriological diphtheria, 23 ; chicken-pox, 6 ; measles, 6.

**ANTITOXIN.**—Many cases were given scarlet fever antitoxin (Parke, Davis & Co.). The dose varied with the severity of the disease. A prophylactic dose was given to one case where the diagnosis was altered. The amounts injected were as follows :—23 cases had 5 c.c. or less ; 124 cases had 5 to 10 c.c. ; and 4 cases from 10 to 15 c.c. No anti-scarlet serum given to the fatal cases.

Eleven cases developed a serum rash, or 6·5 per cent. of cases which were given serum (either A.D.S., scarlet serum, or both).

Many cases were also given anti-diphtheria serum (Parke, Davis & Co.) in treatment of the disease and to clear up discharges :—8 had 5,000 units or less ; 101 had 5,000 to 10,000 units ; 11 had 10,000 to 20,000 units ; 2 had 20,000 to 30,000 units.

A number of cases received only anti-diphtheria serum (Parke, Davis & Co.) in treatment of the disease and to clear up discharges :—14 had 4,000 to 10,000 units ; 2 had 10,000 to 20,000 units ; and 1 had 40,000 units.

98 cases were given calcium sulphide, and 97 proseptasine.

### **Diphtheria.**

Eighteen cases of diphtheria were in the hospital at the beginning of the year. 120 cases were admitted, of whom 4 were diagnosed wrongly. Of the proved cases, 114 were discharged well, 3 died, leaving 17 in residence at the end of the year.

Of the wrongly diagnosed cases one died from aneurysm of the aorta in Stobhill Hospital. (Transferred, 12/2/37).

**REMOVAL TO HOSPITAL.**—This was carried out within the first three days of illness in 49 per cent. of cases, and 51 per cent. of cases were removed after third day.

**AVERAGE DURATION OF RESIDENCE.**—In the recovered cases the residence was 47 days ; in the fatal cases the residence was 1·7 days.

The average number of days before removal to hospital was 4·6 days in the recovered cases, and 2 days in the fatal cases.

**ALTERED DIAGNOSES.**—In 4 cases the diagnosis was altered as follows :—Tonsillitis, 2 ; scarlet fever, 1 ; and one case of aneurysm of the thoracic aorta. (Transferred to Stobhill Hospital on 12th February, 1937, where he died on the 3rd day of residence).

**TYPE OF DISEASE.**—The virulence of infection appears to vary, the cases admitted in the summer months appearing to be of a more virulent type.

**FAUCIAL DIPHThERIA.**—In 97 cases, excluding the fatal cases, the site of the lesion was the fauces.

*Mild.*—Nine cases were of a mild type, with little toxaemia. The average amount of antitoxin given was 15,000 units, and the average residence was 53 days.

*Complications.*—Adenitis, 1; serum rash, 2; skin sepsis, 5; conjunctivitis, 1; and albuminuria, 1.

*Moderate.*—Eighty cases were classified as moderate, associated with some toxaemia. The average amount of antitoxin given was 33,500 units and the average period of residence was 42 days.

*Complications.*—Adenitis, 1; serum rash, 20; cardiac irregularity, 7; albuminuria, 8; tonsillitis, 1; arthritis, 2; rhinitis, 1; skin sepsis, 16; conjunctivitis, 3; palatal paresis, 1.

*Severe.*—Eight cases were classified as severe—extensive local lesion and profound toxaemia. Amount of antitoxin given was 76,000 units. Average duration of residence was 50 days.

*Complications.*—Albuminuria, 1; serum rash, 6; palatal paresis, 2; and two cases relapsed (10th week).

**LARYNGEAL DIPHThERIA.**—Excluding fatal cases, 1 case showed the larynx alone involved. The amount of antitoxin given was 30,000 units, and the duration of residence was 37 days.

No Tracheotomy for obstruction in laryngeal diphtheria was performed.

**NASAL CASES** numbered 1.—The dose of antitoxin given was 18,000 units, and duration of residence was 46 days.

**LARYNGEAL AND FAUCIAL CASES** numbered 2. One recovered. 56,000 units (A.D.S.) were given. The recovered case was resident for 44 days, and the fatal case died on the 3rd day of residence.

POSITIVE SWAB CASES, 13. Average dose of serum was 12,000 units, average duration of residence 40 days, and average day of illness on admission was 5 days.

*Complications.*—Serum rash, 1 ; skin sepsis, 6 ; albuminuria, 2.

FAUCIAL AND PHARYNGEAL CASES.—One case, in for 43 days, had 70,000 units of serum and made a good recovery, although she developed albuminuria and had an irregular pulse. (No heart lesion).

FATAL CASES numbered 3—faucial and laryngeal, 1 ; laryngeal, 2. Average amount of antitoxin given was 21,000 units, and the average duration of residence was 1·5 days. Died from cardiac paralysis.

THE FATALITY RATE (calculated on clinical cases) was 2·5 per cent.

MIXED INFECTIONS.—Scarlet fever, 1 ; tubercular adenitis, 2 (both transferred).

ANTITOXIN.—Messrs. Parke, Davis & Co.'s diphtheria antitoxin used. Average amount given to cases discharged well was 33,000 units. Twenty-nine cases had a serum rash, but this faded in a day or so.

134 cases were given calcium sulphide and sodium chloride, 8 cases were given proseptasine, 4 were given Vibex, and 16 had gas gangrene serum (P. D. & Co.).

### **Pneumonia.**

Fourteen cases were in hospital at the beginning of the year. 140 cases were admitted, of whom 14 cases were wrongly diagnosed. Of the true cases, 100 were discharged well ; of the wrongly diagnosed cases, 14 were discharged well. Twenty-four cases (true) died and 16 cases remained at the end of the year.

#### **CLASSIFICATION OF DISEASE IN TRUE CASES :—**

- (a) Acute lobar pneumonia, 55, of whom 8 died.
- (b) Broncho-pneumonia, 39, of whom 10 died.
- (c) Influenzal pneumonia, 29, of whom 6 died.
- (d) Pneumonia and whooping cough, 0.
- (e) Empyema, 1 (with discharging sinus).



THE AVERAGE DAY OF DISEASE on admission of true cases was :—Broncho-pneumonia, 6th day ; lobar pneumonia, 4th day ; influenzal pneumonia, 8th day.

THE FATALITY RATE, calculated on discharges, was 24 per cent. (7·6 per cent. decrease from 1936).

*Complications.*—Abscesses, 3 (2 incised, 1 aspirated) ; empyema was present in 1 case, aspiration giving good results ; otitis media, 2 ; enteritis, 5 ; albuminuria, 17 ; nasal discharge, 5 ; jaundice, 2 ; skin sepsis, 5 ; and meningismus, 2.

CORRECTED DIAGNOSES numbered 14.—Phthisis, 1 (transferred to Shotts) ; bronchitis, 11 ; influenza, 1 ; and 1 case of tubercular pleurisy (transferred).

ADDITIONAL CONDITIONS ON ADMISSION.—Poultice erythema, 23 ; gastro-enteritis, 2 ; discharging nose, 2 ; discharging ear, 3 ; heart murmur, 1 ; cervical adenitis, 1 ; skin sepsis, 29 ; other skin conditions, 4 ; strabismus, 1 ; hernia, 1 ; pes cavus, 1 ; hypothyroidism, 1 ; tongue tie, 2.

DEATHS numbered 24.—Lobar pneumonia, 8 ; broncho-pneumonia, 10 ; influenzal pneumonia, 6.

ALTERED DIAGNOSIS DEATHS.—None.

### **Erysipelas.**

One case was in hospital at the beginning of the year. Twenty-five cases were admitted. Of the true cases, 22 were discharged well, 2 died, and 2 cases were left in hospital at the end of the year.

ALTERED DIAGNOSIS.—No cases wrongly diagnosed.

AVERAGE DAY OF ILLNESS on admission was the 4th day.

FATALITY RATE (based on discharges) was 9 per cent.

Two cases were given Evans & Co.'s erysipelas serum ; 7 cases had only local treatment ; 5 had proseptasine ; and 10 cases were given serum and proseptasine.

THE AVERAGE AGE was 38 years.

THE AVERAGE DURATION OF RESIDENCE was 33 days.

SITUATION OF DISEASE.—Face, 16 ; leg, 3 ; arm and face, 1 ; breast, 1 ; face and ankle, 1 ; neck, 1 ; and scalp, 1.

FATAL CASES.—Two (females). Both were acutely ill and toxic on admission. One case suffered from a fungating cancer of the breast.

*Situation of Lesion.*—Face, 1 ; breast, 1.

#### TREATMENT OF ERYSIPELAS :—

Treatment.	Number of Cases.	Average Residence.	Average Dose.	Deaths.
Local Treatment,	7	30 Days.	—	—
Serum and Local,	2	47 „	10 c.c.	—
Proseptasine and Local, ... ..	5	35 „	8 grms.	2
Serum, Proseptasine and Local, ...	10	31 „	10 c.c. and 12 grms.	—

*Complications.*—Sub-cutaneous abscesses, 2 (incised) ; cellulitis, 2 ; albuminuria, 1 ; skin sepsis, 4 ; discharging ear, 2 ; discharging nose, 2.

#### Meningitis (Tubercular).

There was no case in hospital at the beginning of the year. One case was admitted, and he died.

FATAL CASE, 1.—Tubercular meningitis (confirmed bacteriologically). Died on 14th day (25th day of illness).

#### Typhoid.

No cases admitted.

#### Other Diseases.

There were 6 unclassified cases admitted in 1937. Three were discharged well, two died, leaving one case in at end of the year ; acute focal nephritis, 1 ; fibrinous pleurisy, 1 ; endocarditis, 1 ; pleurisy with effusion, 1 ; pneumonia and meningitis, 1 ; and pneumonia and whooping cough, 1. The last two cases died.

### Cerebro Spinal Fever.

During the year two cases were admitted; both were wrongly diagnosed. One was proved bacteriologically to be tubercular meningitis, and she died on the 8th day of residence (14th day of illness). The other was finally diagnosed and proved to be a brain tumour. As his parents refused any operation he was discharged, after a residence of 29 days, to his home in Ireland.

### Ambulance Work.

					Mileage.
Admissions to Lightburn,	...	...	...	...	4,703
„ Motherwell,	...	...	...	...	2,278
„ other Institutions,*	...	...	...	...	1,362
Transfers, †...	...	...	...	...	55
Discharges,	...	...	...	...	2,752
Other runs,	...	...	...	...	2,900
Cases (X-rayed at Motherwell),	...	...	...	...	110
Outside case (X-rayed at Stonehouse),	...	...	...	...	44
Total,					14,204

\* Longriggend, Hairmyres, Shotts, Stonehouse, and Omoa.

† Shotts, Stobhill, Hairmyres, and Longriggend.

### Buildings and Grounds.

The following is a summary of the more important repairs and renewals executed during the year.

Internal alterations were carried out at Pavilion I and at the Lodge. Certain portions of the woodwork were renewed. The main electric switch-board was encased, and the electric cables from the switch-board to the Lodge and cottages renewed. An Esse Cooker was installed in the kitchen, 23 blinds were renewed, and a safe provided for the office. Minor repairs were carried out on the Calorifier and the Steam Disinfector.

### Staff.

The staff at the end of the year comprised—1 physician-superintendent, 1 matron, 5 sisters, 1 staff nurse, 24 probationer nurses.

The domestic staff consisted of—1 cook, 2 kitchen maids, 4 laundry maids, 5 home maids, 4 ward maids.

The outdoor staff comprised—1 foreman mechanic, 3 firemen, 1 chauffeur, 1 handyman.

STAFF ILLNESSES.—One nurse was warded with diphtheria and one with scarlet. A sister and a maid were warded with endocarditis and nephritis.

IMMUNISATION.—No tests performed.

EXAMINATIONS (Nurses') for 1937.—Eight probationer nurses passed the Preliminary Examination, held by the General Nursing Council.

Seven probationer nurses passed the Final Examination and were then granted the General Nursing Council Certificate for Fever Nursing.

ALEX. W. M. BATTERSBY.

# INFECTIOUS DISEASES HOSPITAL AND SANATORIUM, ROADMEETINGS.

## ANNUAL REPORT BY PHYSICIAN-SUPERINTENDENT.

*Resident Physician-Superintendent*—J. C. MACARTHUR, M.B., Ch.B.

*Matron*—Miss RAMSAY.

## INFECTIOUS DISEASES HOSPITAL.

1937.

On the 1st January, 1937, 76 patients were in residence. During the year 446 were admitted, making a total of 522. Of these, 450 were discharged well, 27 died, and 45 were in residence at the end of the year.

The details of these admissions and discharges are summarised in the following table:—

		In Hospital 1st Jan., 1937.				Discharged.				Remaining in Hospital 31/12/37.	
		Admitted.				Recovered.		Died.			
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Scarlet Fever,	...	21	10	87	103	93	102	1	1	14	10
Diphtheria, ...	...	17	14	61	93	72	95	3	6	3	6
Pneumonia, ...	...	5	5	32	33	25	30	7	3	5	5
Enteric Group,	...	—	—	3	1	3	1	—	—	—	—
Meningitis, ...	...	—	—	2	2	1	—	1	2	—	—
Erysipelas, ...	...	—	—	2	2	1	2	1	—	—	—
Others, ...	...	2	2	10	15	8	17	2	—	2	—
		45	31	197	249	203	247	15	12	24	21
		76		446		450		27		45	
		522				522					

The total admissions for this year show an increase of 12 per cent. as compared with last year. No disease has reached epidemic proportions.

*Scarlet Fever.*—The total number of admissions this year is almost the same as last year. The type of disease continues this year as last to be mild, only 3·2 per cent. of the cases discharged being classified as severe. The death rate works out at 1·1 per cent. and represents 1 death respectively from a true toxic and a true septic scarlatina.

*Diphtheria.*—The increased incidence and severity of diphtheria in this area, noted in the latter half of 1936, continued during this year. The increase in the numbers admitted this year, as compared with last, is 15 per cent. and 40 per cent. as compared with 1935. The death rate was 6 per cent. as compared with 5·1 per cent. last year. This increased virulence of the infecting organism occurs with a regular periodicity and is a well recognised feature in epidemiology, and as the numbers at no time during the year have reached epidemic proportions in any part of the area, there is no cause for alarm.

*Pneumonia.*—The number of cases admitted during the year is a slight increase from last year. There is also an increase of 10 per cent. as compared with last year in the number of cases in which the diagnosis was revised. The death rate over all cases was 21·9 as compared with 22 per cent. last year.

The total number of admissions was greatest during November, the total for that month being 62.

The average duration of residence of all cases discharged was 40·2 days ; of recovered cases 46·6 days ; and of fatal cases 7·2 days.

The fatality rate as calculated on all cases discharged was 5·6 per cent.

The following table summarises the admissions and discharges for each month of the year :—

	Jan.	Feb.	March.	April	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Admitted, ...	32	34	51	36	42	31	23	24	30	41	62	40
Discharged—												
Recovered,	60	37	33	28	36	50	27	20	21	32	30	76
Died, ...	4	2	4	1	3	2	3	2	1	2	2	1



*Corrected Diagnosis.*—The diagnosis was revised in 100 cases, or 20·9 per cent. of the total cases discharged.

*Sanatorium.*—There is a considerable increase in the number of cases admitted this year as compared with last. This is accounted for by reason of cases being admitted for the purpose of observation and having the diagnosis established. Unfortunately, of the established cases, the large proportion of admissions are still of bilateral disease. The detail statistics appear in a separate section.

The following table gives the admissions annually since the opening of the hospital in 1928 :—

Year.	Total Number of Cases Admitted.						
1928, ... ..	62						
1929, ... ..	349						
1930, ... ..	393						
1931, ... ..	464						
1932, ... ..	679						
1933, ... ..	619						
1934, ... ..	663						
1935, ... ..	478						
1936, ... ..	417						
1937, ... ..	446						

#### SCARLET FEVER.

Thirty-one cases of scarlet fever were in hospital at the beginning of the year. During the year 190 patients were admitted. The diagnosis was revised in 10 cases. Of the remaining 211 cases, 185 were discharged well, 2 died, and 24 were in hospital at the end of the year.

Removal to hospital was carried out in 96 per cent. of the cases in the first week of illness, 1·5 per cent. in the second week, and 2·5 per cent. in the third or later weeks.

The average day of disease on admission of all cases discharged was 3·3 days.

*Duration of Residence.*—The average duration of residence of all cases discharged was 44.1 days ; of recovered cases 44.5 days ; and of the 2 fatal cases 4 days and 4 hours respectively.

*Type of Disease.*—The cases have been, as usual, classified as mild, moderate, or severe, depending on the severity of the initial attack and the degree of toxæmia present, and not in relation to the complications, mild or severe, which may develop during the period of residence.

148, or 79.1 per cent. of the total cases discharged were classified as mild.

33, or 17.6 per cent. of the total cases discharged were classified as moderate.

\*6, or 3.2 per cent. of the total cases discharged were classified as severe.

\* Of those cases classified as severe, one was a true Toxic Scarlet Fever and one a true Septic Scarlet Fever. Both cases proved fatal.

*Fatality Rate.*—2 cases, or 1.1 per cent. of the cases discharged, died.

(1) Male, aged 64 years, suffering from septic scarlet fever, died on the 4th day. 140 c.c. scarlet fever antitoxin given without any response.

(2) Female, aged 3 years, suffering from a severe toxic scarlet fever, died in 4 hours.

*Corrected Diagnosis.*—Of the cases notified as scarlet fever, 10, or 5.3 per cent. were wrongly diagnosed. These were :—Diphtheria, 1 ; sore throat, 1 ; broncho-pneumonia, 1 ; food rash, 1 ; burn, 3 ; quinsy, 1 ; doubtful, 1 ; nil, 1.

*Complications.*—95 patients, or 51.9 per cent. of the cases discharged, developed one or more of the following complications. As before noted, the severity or otherwise of the initial attack bears no proportionate relation to the degree or type of the complications which may develop during the course of the disease.

*Glands.*—39, or 21.4 per cent., showed some degree of cervical adenitis. The majority were mild, but every case, however, slight, has been included. Suppurative adenitis, 3 ; non-suppurative adenitis, 36.

*Ears*.—13, or 6·9 per cent., developed otitis media, and of these, one developed acute-suppurative mastoiditis, which required an operation.

*Nose*.—21, or 11·2 per cent., developed rhinorrhoea.

*Joints*.—7, or 3·7 per cent., developed definite signs of rheumatism, and have been classified as follows, according to duration and severity of symptoms :—Acute rheumatism, 3 ; sub-acute rheumatism, 1 ; joint pains, 3.

*Kidneys*.—4, or 2 per cent., developed acute nephritis ; 5, or 2·5 per cent., developed sub-acute nephritis. 6 cases showed albuminuria of varying degrees. In all cases the urine was clear prior to discharge.

*Heart*.—5, or 2·5 per cent., showed cardiac symptoms. They were classified as follows :—Transient tachycardia, 4 ; functional arrhythmia, 1.

*Sepsis*.—Septic finger, 6 ; septic sores, 5 ; boils, 3 ; abscesses, 2 ; quinsy, 3.

*Other Complications*.—Conjunctivitis, 1 ; blepharitis, 4 ; herpes, 3 ; tonsillitis, 8 ; bronchitis, 1 ; laryngitis, 1.

*Conditions present but not as complications of Scarlet Fever*.—Burn of forearm, 1 ; sprained ankle, 1 ; impetigo, 3 ; erysipelas, 1 ; myocarditis, 1 ; scabies, 3.

*Scarlet Fever Antitoxin*.—The results of treatment with scarlet fever antitoxin are summarised in the following table. As the prevailing type of disease this year was mild, scarlet fever antitoxin has not been extensively used, and was only given in the more acute cases. 36, or 19·2 per cent. of cases discharged received scarlet fever antitoxin. The average dose was 25 c.c.s.

	Mild.	Mod.	Sev.	Total.	Complications.	
					No.	%
Cases treated with serum,	14	16	6	36	28	76
Cases not treated with serum, ... ..	134	17	—	151	67	45

*Serum Rash.*—13, or 38 per cent. of the cases treated with serum developed serum rashes. They were, in the main, urticarial, and did not give rise to any constitutional disturbance.

*Diphtheria Antitoxin.*—7 cases received diphtheria antitoxin. The average dose was 30,000 units.

*Mixed Infection.*—Scarlet fever and whooping-cough, 1; scarlet fever and chicken-pox, 4.

*Cross Infection.*—4 cases admitted with scarlet fever and incubating chicken-pox infected 8 others.

*"Return" Cases.*—Taking 28 days as the arbitrary period within which a case is regarded as a "return," it was found that apparently 4 cases infected 5 others. The return cases occurred from 7 to 26 days after the dismissal of the "infecting cases." Of the 4 "infecting cases," 1 had a discharging nose and 1 otitis media while in hospital. In both cases, however, the discharge had completely subsided before dismissal. The average duration of residence in hospital of the "infecting cases" was 47·5 days.

*The Infectivity Rate.*—The infectivity rate calculated on this basis is, therefore, 2·6 per cent.

The following table summarises the statistics relating to scarlet fever since the opening of the hospital in 1928:—

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
No. of scarlet fever cases										
discharged recovered,	23	153	124	250	472	405	434	287	171	185
No. of return cases, ...	—	1	2	6	7	7	5	6	6	5
Infectivity Rate, ...	—	0·6	1·6	2·4	1·4	1·8	1·1	2·1	3·5	2·6
No. of deaths from scarlet fever, ...	—	2	1	—	3	4	3	2	1	2
Fatality Rate per cent.,	—	1·3	0·8	—	0·63	0·9	0·7	0·7	0·58	1·06
Average duration of residence in days of the patients discharged,	—	44·6	44·8	44·9	33·6	38·9	37·6	37·7	43·6	44·1

### Diphtheria.

31 cases of diphtheria were in residence on 1st January, 1937. During the year, 154 cases were admitted, and 1 other proved to be diphtheria. The diagnosis was revised in 45 cases, 1 of whom died. Of the 141 true cases, 124 were discharged well, 8 died, and 9 were in residence at the end of the year.

Removal to hospital was carried out within the first 3 days in 60·4 per cent. of the cases. In the fatal cases the average duration of illness prior to admission was 3·7 days.

The average day of disease on admission of all cases discharged was 3·6 days.

*Duration of Residence.*—The average duration of residence in hospital of all cases discharged was 38·9 days ; of recovered cases 41 days ; and of fatal cases 10·7 days.

*Type of Disease.*—The cases have been classified according to the site and extent of the lesion, together with the initial degree of toxæmia present, as summarised in the following table :—

Site of the Lesion.			Mild.		Moderate.		Severe.		Total.	
			Rec.	Died.	Rec.	Died.	Rec.	Died.	Rec.	Died.
Faucial,	...	...	43	—	45	—	22	4	110	4
Faucial and Nasal,	...	...	2	—	5	—	1	4	8	4
Nasal,	...	...	4	—	1	—	—	—	5	—
Laryngeal,	...	...	—	—	1	—	—	—	1	—
			49	—	52	—	23	8	124	8

1. FAUCIAL DIPHTHERIA.—In 114 cases, the faucial region of the throat alone was involved. They have been classified as mild, moderate or severe.

(a) *Mild.*—In 43 cases, the disease was classified as mild. The average amount of serum given was 15,000 units. There were no deaths. Three patients had serum prior to admission.

*Complications.*—12 patients developed one or more of the following complications :—Albuminuria, 1 ; rhinorrhoea, 4 ; cervical adenitis, 3 ; tonsillitis, 1 ; palatal paralysis, 1 ; acute nephritis, 1.

*Conditions present, but not as direct complications of diphtheria.*—

Scabies, 2; thread worms, 1; acute conjunctivitis, 1.

*Serum Rash.*—4 patients in this group developed serum rashes, giving a percentage of 3·5.

- (b) *Moderate.*—45 cases were classified as moderate. In these, the membrane was fairly extensive and bilateral, and considerable systemic toxæmia was present. The average amount of serum given was 34,000 units. There were no deaths.

*Complications.*—13 patients developed one or more of the following complications :—Cervical adenitis, 7; rhinorrhoea, 6; palatal paresis, 1; albuminuria, 2; mycotic infection of tonsil, 1; in this case the tonsil had to be removed.

*Conditions present, but not as direct complications of diphtheria.*—  
Bronchitis, 1.

*Serum Rash.*—10 patients in this group developed serum rashes, giving a percentage of 22·2.

- (c) *Severe.*—26 patients were classified as severe. In these cases, the membrane was very extensive, involving fauces, palate, etc., and systemic toxæmia was very marked. The average amount of serum given was 76,000 units. There were 4 deaths in this group.

*Complications.*—11 patients developed one or more of the following complications :—Cervical adenitis, 4; rhinorrhoea, 2; palatal paresis, 6; vagal paresis, 4; albuminuria, 4; tachycardia, 2; conjunctivitis, 1.

*Conditions present, but not as complications of diphtheria.*—  
Septic sores, 1.

*Serum Rash.*—7 patients in this group developed serum rashes, giving a percentage of 26·9.

*Scarlet Fever Antitoxin.*—1 patient only had scarlet fever antitoxin.



*Fatal Cases.*—Of the 4 fatal cases in this group, one admitted on 7th day of disease was moribund and died from severe toxic diphtheria in 10 hours. The other three deaths occurred on the 8th, 11th and 15th days of residence, respectively, and were due to cardiac failure, following on paralysis of the vagus nerve. The average dose of serum given in these cases was 115,000 units. The average day of disease on admission was the 4th day.

2. FAUCIAL AND NASAL.—12 cases were classified in this group, 2 mild, 5 moderate and 5 severe. The average amount of serum given was 10,000 units in mild cases, 30,000 units in moderate cases, and 100,000 units in severe cases. There were 4 deaths in this group.

*Complications.*—8 patients developed one or more of the following complications :—Cervical adenitis, 5 ; rhinorrhoea, 7 ; palatal paresis, 1 ; vagal paresis, 1.

*Conditions present, but not as direct complications of diphtheria.*—V.D.H., 1 ; impetigo, 1.

*Serum Rash.*—2 patients in this group developed serum rashes.

*Fatal Cases.*—Of the 4 fatal cases in this group, 3 were cases of severe toxic diphtheria. The average day of disease on admission being 5th day and average duration of residence 10 days. The average amount of serum given was 173,000 units. The 4th case died on the 19th day from vagal paralysis.

3. LARYNGEAL.—1 case was classified as such. The case was moderate and the amount of serum given was 40,000 units.

*Complications.*—Rhinorrhoea, 1.

4. NASAL.—5 cases were classified in this group. 4 were mild and 1 moderate. The average amount of serum given was 15,000 units. There were no deaths.

*Complications.*—Otitis media, 1.

*Total Complications.*—46 patients, or 34·8 per cent. of the clinical cases discharged, developed one or more complications, as summarised in the following table :—

			Cervical Adenitis.	Rhin- orrhoea.	Otitis Media.	Album- inuria.	Acute Nephritis.
In 132 cases discharged,	...		19	20	1	1	1
Percentage,	...	...	14·4	15·1	·75	·75	·75
			Tonsill- itis.	Tachy- cardia.	Conjunc- tivitis.	PARESIS. Palate. Vagus.	Ocular Muscles.
In 132 cases dis- charged,	...	2	2	1	9	5	3
Percentage,	...	1·5	1·5	·75	6·7	3·7	2·2

*Corrected Diagnosis.*—45, or 29 per cent. of the total number of cases admitted, were wrongly diagnosed. The diagnosis in these cases was revised as follows :—Pneumonia, 1 ; bronchitis, 1 ; gastro-enteritis, 1 ; cerebral abscess, 1 ; nil, 1 ; atrophic rhinitis, 1 ; measles, 2 ; positive swab, 15 ; sore throat, 2 ; tonsillitis, 20.

*Fatality Rate.*—8 patients, or 6 per cent. of the clinical cases discharged, died. The average day of disease on admission was 4 days, and the duration of residence 10·7 days.

*Antitoxin.*—The average amount of serum given in all clinical cases discharged was 31,000 units, and in the fatal cases 108,000 units. 1 patient, or ·75 per cent. of the clinical cases discharged had scarlet fever antitoxin. 23 patients, or 17·3 per cent. of the clinical cases discharged, developed serum rashes.

### Pneumonia.

Ten cases were in residence at the beginning of the year. During the year 65 cases were admitted and 1 other proved to be pneumonia. The diagnosis was revised in 25 cases, 1 of whom died. Of the remaining 51 cases, 32 were discharged well, 9 died, and 10 were in residence at the end of the year.

*Classification of Disease.*—Lobar, 28 ; bronchial, 13.

The average day of disease on admission of all cases discharged was 4·9 days ; of recovered cases, 4·8 days ; and of fatal cases, 5·5 days.

The average duration of residence of all cases discharged was 44 days ; of recovered cases, 53·5 days ; and of fatal cases, 4·7 days.

*The Fatality Rate.*—9, or 21·9 per cent., of the cases discharged, died. The fatal cases were classified as, 6 lobar pneumonia (two cases being double pneumonia) and 3 broncho-pneumonia.

*Complications.*—9, or 21·9 per cent., of the cases discharged suffered from one or more of the following complications :—Delayed resolution, 3 ; abscess, 2 ; quinsy, 1 ; prepatellar bursitis, 1 ; suppurative pericarditis, 1 ; pulmonary fibrosis, 2 ; enteritis, 1.

*Corrected Diagnosis.*—25 of the patients admitted had the diagnosis of pneumonia revised as follows :—Bronchitis, 11 ; capillary bronchitis, 3 ; pleurisy, 1 ; empyema, 1 ; otitis media, 1 ; nil, 1 ; constipation, 1 ; broncho-pneumonia, 1 ; whooping-cough, 1 ; impetigo of scalp, 1 ; influenza, 1 ; laryngitis, 2.

*Empyema.*—1 case occurred as a complication of a lobar pneumonia and two were admitted as such, in one of which the diagnosis was revised to acute-bronchitis. In the remaining two cases, there were secondary complications which proved fatal, the cause of death being respectively, suppurative pericarditis and V.D.H.

*Sex.*—Male, 2 ; female, 1.

### Enteric Group.

There were no cases in residence on 1st January, 1937. During the year 4 cases were admitted as belonging to this group. 2 cases proved to be true clinical cases of typhoid fever, one case a true clinical case of para typhoid B, and one a para typhoid B carrier. Of the 3 clinical cases, 2 were classified as moderate and one as severe. In the latter, the disease was complicated with a severe bowel haemorrhage. There were no deaths.

### Meningitis.

No cases were in residence on 1st January, 1937. During the year 4 cases were admitted as such, and one other proved to be meningitis. Of these five cases, two proved to be cerebro-spinal fever, 2 tuberculous meningitis, and 1 pneumococcal meningitis.

*Cerebro-Spinal Fever.*—Of the 2 cases, 1 died and 1 recovered.

The average day of disease on admission was the 6th day.

*Duration of Residence.*—The duration of residence was 44 days in the recovered case, and 24 days in the fatal case.

*Sex and Age.*—Recovered case, male, aged 2 years; fatal case, female, aged five weeks.

*Treatment.*—Both cases were treated with meningococcus antitoxin intramuscularly and intrathecally.

*T.B. Meningitis.*—Both cases proved fatal.

*Pneumococcal Meningitis.*—One male, aged 66 years, admitted on 7th day of disease, died after 6 days' residence in hospital.

### Erysipelas.

No cases were in residence at the beginning of the year. During the year 4 were admitted as such. In one case the diagnosis was revised. The remaining three cases were discharged well.

*Type of Disease.*—In two cases the disease was confined to the face and the other to the arm.

The average day of disease on admission of all cases discharged was 4 days.

*Duration of Residence.*—The average duration of residence in hospital of all cases discharged was 17·3 days; of recovered cases, 17·3 days.

*Revised Diagnosis.*—In 1 case the diagnosis was revised to basal meningitis which proved fatal.

## MISCELLANEOUS CASES DISCHARGED DURING 1937.

	Rec.	Died.
Rhinitis, ... ..	1	—
Trachoma, ... ..	2	—
Rat-Bite Fever, ... ..	1	—
Bronchitis and Asthma, ... ..	1	—
Acute Bronchitis, ... ..	2	—
Tonsillitis, ... ..	1	—
Rheumatoid Arthritis, ... ..	2	—
Pleurisy, ... ..	2	—
Pleurisy with Effusion, ... ..	3	—
Admitted with Mother, ... ..	1	—
T.B. Abdomen, ... ..	—	1
Gangrene of Lung, ... ..	—	1

## SANATORIUM.

On 1st January, 1937, there were 22 patients in residence in the Sanatorium. During the year 31 patients were admitted to the Sanatorium and 7 to Isolation from the T.B. Register. Of these 60 patients, 33 were discharged improved or well, 4 died, and 23 were in residence at the end of the year.

## ADMISSIONS AND DISCHARGES FOR 1937.

In Hospital, 1st January, 1937.	Admitted.	Discharged.	Died.	Remaining, 31st December, 1937.
22	38	33	4	23

*Sex and Classification.*—There were 20 males and 17 females discharged. They were classified as:—*Pulmonary*, 24; *non-pulmonary*, 4; *non-tuberculous*, 9.

The following table gives the distribution according to age-groups, sex, and type of disease :—

Age Groups.	Males.	Females.	Total.	Pul.	Non-Pul.	Non-T.B.
— 5	—	—	—	—	—	—
—10	1	2	3	—	2	1
—15	1	4	5	2	1	2
—20	2	1	3	1	—	2
—25	2	3	5	3	1	1
—30	2	2	4	4	—	—
—35	3	1	4	4	—	—
—40	1	1	2	1	—	1
—45	3	—	3	2	—	1
—50	1	—	1	—	—	1
—55	2	3	5	5	—	—
—60	1	—	1	1	—	—
—65	1	—	1	1	—	—
	20	17	37	24	4	9

The following table gives the place of residence of the patients admitted during the year :—

Lanark, ... ..	3	Lesmahagow, ... ..	2
Rosebank, ... ..	1	Newmains, ... ..	1
Law, ... ..	1	Leadhills, ... ..	1
Biggar, ... ..	1	Blantyre, ... ..	1
Shotts, ... ..	1	Holytown, ... ..	1
Strathaven, ... ..	1	Carluke, ... ..	2
Bellshill, ... ..	3	Tarbrax, ... ..	1
Cambuslang, ... ..	4	Airdrie, ... ..	1
Carstairs Junction, ... ..	1	Rutherglen, ... ..	1
Uddingston, ... ..	2	Overtown, ... ..	1
Coalburn, ... ..	3	Waterloo, ... ..	1
Kirkmuirhill, ... ..	1	Symington, ... ..	1
Douglas, ... ..	1	Stepps, ... ..	1



*Duration of Residence.*—The following table gives the duration of residence, in days, of all patients discharged during the year :—

Classification.	Maximum.	Minimum.	Average.
Pulmonary, ... ..	1,361	8	326
Non-Pulmonary, ... ..	657	164	308
Non-Tuberculous, ... ..	242	14	99

### Pulmonary.

There were 24 pulmonary cases discharged during the year, including 3 deaths.

*Duration of Illness* of all cases prior to admission is shown in the following table in three-monthly periods. The cases are classified according to the Turban-Gerhardt scale :—

Classification on Admission.	Months.						Total.
	1-3	3-6	6-12	12-18	18-24	Over 24.	
I.	2	—	1	*1	—	—	4
II.	2	1	1	1	*1	*4	10
III.	—	—	3	4	—	*3	10
	4	1	5	6	1	7	24

\* Including 4 re-admissions for the purpose of further treatment.

*Fatal Cases.*—3, or 12 per cent. of the pulmonary cases died.

*Duration of Illness of Fatal Cases* from date of onset of illness to that of death, recorded in monthly periods, was as follows :—

No. of Patients.	Record in Months.
2	Over 24
1	12-18

*Results of Treatment.*—The general result in treatment in pulmonary tuberculosis is summarised in the following table :—

Classification on Admission,	Disease Arrested.	Very Much Improved.	Improved	I.S.Q.	Died.	Total.
I.	4	—	—	—	—	4
II.	2	5	3	—	—	10
III.	—	2	1	4	3	10

*Bacteriological Examination of the Sputum.*—The following table shows the results of sputum examinations on admission and on discharge :—

Classification on Admission.	No. of Patients.	Sputum Examinations.			
		On Admission.		On Discharge.	
		Pos.	Neg.	Pos.	Neg.
I.	4	1	3	—	4
II.	10	6	4	1	9
III.	10	*10	—	*6	4

\* Including 3 deaths.

### Non-Pulmonary.

During the year 4 cases of non-pulmonary tuberculosis were discharged. They were classified as :—Tuberculous cervical adenitis, 2 ; advanced T.B. of hip-joint, 1 ; T.B. abscess of rib, 1.

*Glands.*—In both cases on admission, there was a chain of hard, shotty glands, with considerable swelling down both sides of neck. With the marked improvement in the general condition which resulted from the ordinary Sanatorium regime, the glands subsided greatly and did not require any operative interference.

*Advanced T.B. of Hip-Joint.*—Patient was a child of 7 years admitted from the Edinburgh Royal Infirmary with advanced disease of the hip-joint. Radiogram showed the head and neck of the femur almost completely absent, and with involvement also of the acetabulum and trochanters. There were also multiple discharging sinuses of the thigh and lumbar region.

Treatment.—Immobilisation of hip-joint ; removal of all pressure from sinuses, etc. ; treatment of abscesses by aspiration and incision and evacuation ; injection of sinuses and tracts.

On discharge all sinuses were firmly healed and the radiogram showed excellent consolidation of the bony lesion. The hip-joint was ankylosed in a favourable position. The child was fitted with a celluloid hip-splint, a raised boot to compensate for the shortening, and a pair of crutches. He was able to walk about freely.

*T.B. Abscess of Rib.*—After several aspirations, abscess completely subsided and patient discharged well.

### Non-Tuberculous.

Of the cases discharged during the year, 9 showed no clinical radiological, or bacteriological evidence of tuberculosis, and were classified as:—General debility following pregnancy, 1 ; bronchitis and sinusitis, 1 ; silicosis, 1 ; aortic aneurism, 1 ; lymphosarcoma of right lung, 1 ; rheumatism disease of heart, 1 ; neurasthenia, 1 ; general debility, 1 ; sarcoma, 1.

*Treatment.*—The type of patients in residence during this year were mostly chronic or advanced cases with bilateral lesions, and presented few opportunities of employing active surgical methods to supplement the usual Sanatorium regime. Of the patients dismissed during the year, only one was treated by artificial pneumothorax. This patient attended as an outdoor patient for refills and was admitted for the purpose of having the artificial pneumothorax terminated. For this purpose a phrenic evulsion was first of all done and the lung thereafter successfully re-expanded.

*Intravenous Gold Therapy—Crisalbine.*—Of the 33 patients discharged during the year, 10 only were suitable cases for crisalbine treatment. In 4 cases the treatment had to be discontinued after the administration of 2.5 gms., 2.6 gms., 3 gms., and 4 gms. respectively, as the patients proved susceptible to Gold Salts, and in each case developed a slight degree of stomatitis. In the remaining 6 cases, one or more courses were completed with good results. In 4 of these the sputum remained negative after the treatment ceased and continued so until the patient was discharged. In the other 2 cases the improvement was only temporary and the sputum became positive again when the crisalbine was discontinued.

In the following table the statistics relating to the above are summarised :—

No. of Patients Treated.	Total No. of Courses Given.	Total No. of Injections.	Total Quantity of Crisalbine.	Aver. Quant. of Cresalbine per Patient per Course.
10	16	176	71.1 gms.	5.9 gms.

### Consultations and Operations by Consulting Staff.

#### Dr. Adam, Otologist—

Drainage of Nasal Sinuses,	...	...	...	...	1
Tonsillectomy and Adenoid Curettage,	...	...	...	...	3
Mastoidectomy,	...	...	...	...	1
Septal Abscess,	...	...	...	...	1
Consultation,	...	...	...	...	1
Total,					7

#### Dr. Mortimer, Ophthalmologist—

Consultations,	...	...	...	...	3
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#### Mr. Duff, Surgeon—

Septicaemia: drainage of abscesses,	...	...	...	...	1
Consultation,	...	...	...	...	1
					12

### Other Operations.

The following table gives the details of the operative work performed during the year, other than the above :—

#### *Empyema—*

Resection of rib and drainage,	...	...	...	...	2
Aspirations,	...	...	...	...	10

#### *Cervical Adenitis—*

Dissection of glands,	...	...	...	...	1
-----------------------	-----	-----	-----	-----	---

#### *Suppurative Cervical Adenitis—*

Incision and evacuation,	...	...	...	...	5
--------------------------	-----	-----	-----	-----	---

#### *Acute Abscess of Buttock—*

Incision and drainage,	...	...	...	...	3
------------------------	-----	-----	-----	-----	---

#### *Acute Abscess of Thigh—*

Incision, evacuation and drainage,	...	...	...	...	1
------------------------------------	-----	-----	-----	-----	---

Carry forward, ... 21

## OTHER OPERATIONS—contd.

	Brought forward,	...	21
<i>Acute Abscesses of Fore-arm and Hand—</i>			
Incision and drainage,	...	...	5
<i>Quinsy—</i>			
Incision and evacuation,	...	...	6
<i>Minor Abscesses, Onychia, etc.—</i>			
Incision, removal, etc.,	...	...	15
<i>Pleurisy with Effusion—</i>			
Aspirations,	...	...	4
<i>Pulm. T.B.—</i>			
Phrenic Evulsion,	...	...	1
<i>Artificial Pneumothorax—</i>			
Induction and Refills,	...	...	12
<i>T.B. Abscesses—</i>			
Aspirations,	...	...	4
	Total,	...	69

## Buildings and Grounds.

During the year the outdoor paint work of the whole Institution was done. Indoor paint work was carried out in the Administrative Block and the Sanatorium Home. During the year the verandahs of the hospital wards were fitted with glass roofs. Also, the verandahs were laid with new concrete blocks. The Hobart Manufacturing Co.'s Electrical Potato Machine was installed in the kitchen.

## Staff.

The indoor staff consists of 1 resident physician-superintendent, 1 matron, 4 sisters, 7 staff nurses, 16 probationers, 20 maids, and 1 clerkess.

The outdoor staff consists of 1 engineer, 3 firemen, 1 chauffeur, 1 gardener, 1 assistant gardener-chauffeur, and 1 seasonal-gardener.

*Lectures.*—During the year a qualifying course of lectures on anatomy and physiology, hygiene, and the theory and practice of nursing was given. 6 probationers were entered for the preliminary examination of the General Nursing Council's Certificate in Fever Nursing. 1 failed in all subjects, the remaining 5 were successful.

5 senior nurses were entered (from Motherwell) for the final examination. They passed in all subjects and gained their certificates.

*Staff Illnesses.*—1 sister, 2 staff nurses, 11 probationers, 7 maids, and 1 male outdoor worker were warded with the following illnesses :—Tonsillitis, 10 ; tena synovitis, 1 ; abscess of the forearm, 2 ; prepatellar bursitis, 1 ; burn of forearm, 1 ; quinsy, 1 ; septic foot, 2 ; albuminuria, 1 ; septic finger, 1 ; renal colic, 1 ; scabies, 1 ; acute choriza, 1 ; injury to knee, 1 ; erysipelas, 1 ; enteritis, 1 ; facial abscess, 1.

The sick staff lost 373 working days.

*Immunisation.*—12 probationer nurses had the Schick and Dick tests performed. Of these, 9 gave a positive Schick reaction and were immunised. 4 gave a positive Dick reaction and were immunised.

### Ambulance Work.

						Mileage.
<i>Admissions —</i>						
Infectious Diseases Hospital,	...	...	...	...	...	7,018
Sanatorium,	...	...	...	...	...	134
						<hr/> 7,152
<i>Discharges—</i>						
Infectious Diseases Hospital,	...	...	...	...	...	5,033
Sanatorium,	...	...	...	...	...	31
						<hr/> 5,064
						<hr/> 12,216
<i>Others,</i>	...	...	...	...	...	5,833
						<hr/> 18,049
Total Mileage,						<hr/> <hr/> 18,049



## HAIRMYRES COLONY.

REPORT BY THE PHYSICIAN-SUPERINTENDENT,  
JAMES JOHNSTONE, M.B., Ch.B., D.P.H.  
FOR THE YEAR 1937.

## PATIENTS TREATED.

The number of patients under treatment during the course of the year is shown in the following tabular statement:—

In Residence 1st January.	Admitted During Year.	Discharged During Year.	In Residence 31st December.
212	140	143	209

## PATIENTS CLASSIFIED ACCORDING TO PARISH OF RESIDENCE.

*(a) County of Lanark.*

Avondale, ... ..	3	East Kilbride, ... ..	5
Blantyre, ... ..	9	Hamilton, ... ..	1
Bothwell, ... ..	28	Lanark, ... ..	3
Cadder, ... ..	5	New Monkland, ... ..	6
Cambuslang, ... ..	18	Old Monkland, ... ..	17
Cambusnethan, ... ..	5	Rutherglen, ... ..	7
Carluke, ... ..	1	Shotts, ... ..	1
Carmunnock, ... ..	1	Stonehouse, ... ..	2
Dalserf, ... ..	6	Total, ... ..	118

*(b) Burghs in County.*

Airdrie, ... ..	1	Lanark, ... ..	1
Hamilton, ... ..	12	Rutherglen, ... ..	2
		Total, ... ..	16

*(c) Outwith the County.*

Clydebank, ... ..	2	Renfrewshire, ... ..	6
Inverness-shire, ... ..	1	Total, ... ..	9

## NATURE OF DISEASE.

Of the 143 patients discharged during the year under consideration, 134 proved to be tuberculous, in 100 cases the disease assuming the pulmonary form, while in 34 it was non-pulmonary. The diseases affecting nine non-tuberculous cases were as follows:—Bronchiectasis, 2; bronchitis, 2; asthma, 1; lymphadenoma, 1; pneumoconiosis, 1; pulmonary fibrosis, 1. In the remaining case no lesion was detected. Three of the non-tuberculous cases died while in residence.

In the statistics which follow, only 134 patients—discharged during the year—who proved to be tuberculous, are referred to:—

## SOCIAL CONDITIONS.

		1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 and over.	Total.
Men,	...	17	35	21	14	8	95
Women,	...	5	9	6	3	1	24
Boys,	...	—	5	2	2	—	9
Girls,	...	1	5	—	—	—	6
Totals,	...	23	54	29	19	9	134

Fifty-seven per cent. of the patients came from houses of less than three apartments. This figure shows a slight reduction compared with last year.

## OCCUPATIONS.

Miners,	...	...	24	Hairdressers,	...	...	2
Motor Engineers,	...	...	10	Merchants,	...	...	2
Tradesmen,	...	...	8	Nurserymen,	...	...	2
Labourers,	...	...	7	Seamen,	...	...	2
Professional,	...	...	7	Soldiers,	...	...	2
Steelworkers,	...	...	6	Furnaceman,	...	...	1
Vanboys,	...	...	4	Gas Producer,	...	...	1
Domestic Servants,	...	...	3	Road Contractor,	...	...	1
Factory Workers,	...	...	3	Slaughterhouse Attendant,	...	...	1
Farm Workers,	...	...	3	Traveller,	...	...	1
Compositors,	...	...	2				

Twenty-six per cent. of the patients were miners.

## PULMONARY TUBERCULOSIS.

		ADMISSIONS.			DISCHARGES.			
		By			By			
		Direct.	Transfer.	Total.	Direct.	Transfer.	Death.	Total.
Men,	...	63	13	76	53	2	21	76
Women,	...	19	3	22	15	—	7	22
Boys,	...	2	—	2	2	—	—	2
Girls,	...	—	—	—	—	—	—	—
		84	16	100	70	2	28	100

## REASONS FOR DISCHARGE.

				Stage I.	Stage II.	Stage III.	Totals.
Treatment Completed,	...	...	...	4	11	9	24
Against Medical Advice,	...	...	...	2	4	7	13
Domestic and Financial,	...	...	...	8	10	8	26
Absconded,	...	...	...	—	5	2	7
Transferred,	...	...	...	—	1	1	2
Died,	...	...	...	—	6	22	28
Totals,	...	...	...	14	37	49	100

## AGE AND SEX DISTRIBUTION.

Quinquennial Periods.	Males.	Females.	Both Sexes.	Age Groups.
Under 5, ...	—	—	—	Pre-School Age.
„ 10, ...	—	—	—	School Age.
„ 15, ...	2	—	2	
„ 20, ...	9	5	14	Adolescence.
„ 25, ...	19	7	26	
„ 30, ...	12	4	16	Early Maturity.
„ 35, ...	5	—	5	
„ 40, ...	6	3	9	
„ 45, ...	9	1	10	
„ 50, ...	5	1	6	Late Maturity,
„ 55, ...	3	—	3	
„ 70, ...	8	1	9	Post Maturity.
Totals,	78	22	100	

Adolescence and Early Maturity continue to be the dangerous periods, although it is interesting to record an increase in the number of cases over 55. Is this due to better diagnosis of patients labelled "bronchitis?"

#### DURATION OF ILLNESS.

		Months.			Years.		
Duration,	...	1-3	3-6	6-12	1-2	2-4	Over 4.
Cases,	...	13	8	12	18	10	39

Forty-nine per cent. of the patients gave a history of over 2 years' illness on admission, a pleasing reduction on last year's figure, and one hopes it will continue.

#### INITIAL MANIFESTATIONS OF ILLNESS.

Cough and Spit,	...	39	Haemoptysis,	...	...	...	4
Pleurisy,	...	17	Loss of Weight,	...	...	...	3
Lassitude,	...	12	Osseous Tuberculosis,	...	...	...	2
Influenza,	...	8	Dermatitis,	...	...	...	1
Debility,	...	6	Ischio Rectal Abscess,	...	...	...	1
Pneumonia,	...	6	Laryngitis,	...	...	...	1

#### RESULTS OF TREATMENT.

The classification adopted is that of Turban-Gerhardt.

		Number of T.B.			No		
Stage.	Patients.	Present.	Quiescent.	Improved.	Change.	Worse.	Died.
I,	14	7	6	6	2	—	—
II,	37	28	9	15	6	1	6
III,	49	42	8	10	7	2	22
Totals,	100	77	23	31	15	3	28

This table shows that patients were admitted in all stages of the disease. Forty-six per cent. showed no change, became worse, or died, and 54 per cent. left the Colony with their health improved. A rather disturbing feature was the increase in the number of deaths (the figure was 18 last year) ; however, it is not surprising considering the type of patient admitted. The Colony may now be considered a combined Colony Sanatorium and Hospital.

#### COMPLICATIONS.

The undernoted table shows complications present in the different stages of the disease. This is only retained for official purposes ; strictly speaking, they are, in the majority of cases, manifestations of the disease. One would draw attention to two patients with involvement of bone as well as lungs—a rather unusual combination.

			Stage I.	Stage II.	Stage III.	Total.
Laryngitis,	...	...	—	2	6	8
Enteritis,	...	...	—	2	—	2
Ischio-Rectal Abscess,			1	—	1	2
Valvular Disease of						
Heart,	...	...	—	1	1	2
Acne,	...	...	—	1	—	1
Carcinoma,	...	...	—	—	1	1
Cervical Adenitis,	...	...	—	—	1	1
Corneal Opacity,	...	...	—	—	1	1
Diabetes,	...	...	—	—	1	1
Disseminated Sclerosis,	...	...	—	—	1	1
Meningitis,	...	...	—	1	—	1
Osseous Tuberculosis,	...	...	—	1	—	1
Otorrhoea,	...	...	—	—	1	1
Renal Tuberculosis,	...	...	—	—	1	1
Spinal Caries,	...	...	—	1	—	1
Trachoma,	...	...	—	1	—	1
Tuberculosis of tongue,	...	...	—	—	1	1
Visceroptosis,	...	...	—	—	1	1
Totals,	...	...	1	10	17	28

## DURATION OF RESIDENCE.

	Under 4 weeks.	4 and under 13 weeks.	13 and under 26 weeks.	26 and under 52 weeks.	52 weeks and over.	Average duration of stay in days.
Stage I,	—	2	5	2	5	284
Stage II,	4	3	3	6	21	678
Stage III,	8	7	5	14	15	372
Totals,	12	12	13	22	41	

This table does not indicate any marked change from former years beyond some increase in the number of patients resident over 26 weeks. It is obvious that the treatment of tuberculosis is a prolonged process, and one cannot look for results in a short period. It is to be hoped that with proper facilities in our new Treatment Block for chest surgery, etc., this period may be shortened. Looking over the records, one is aware of several cases where, if proper facilities for treatment had been available, the duration of residence might have been reduced by as much as 50 per cent.

## DURATION OF RESIDENCE IN DAYS.

	Average.	Maximum.	Minimum.
Men, ...	526	4,548	3
Women, ...	316	1,203	22
Boys, ...	206	338	74

## FAMILY HISTORY.

			Number of	Positive History			
			Cases Discharged.	Stage I.	Stage II.	Stage III.	Percentage.
Men, ...	...	76	3	6	9	24	
Women, ...	...	22	4	1	5	45	
Boys, ...	...	2	—	—	—	—	
Totals, ...			100	7	7	14	28

It is always difficult to obtain the information necessary for the compilation of this table. The tendency is to conceal a positive family history. Consequently, it is of very little value.



## NON-PULMONARY TUBERCULOSIS.

Thirty-four patients received treatment for the non-pulmonary form of tuberculosis.

## AGE AND SEX DISTRIBUTION.

Quinquennial Periods,		Males.	Females.	Both Sexes.	Age Groups.
Under 5,	...	1	—	1	Pre-School Age.
„ 10,	...	3	1	4	School Age.
„ 15,	...	3	5	8	
„ 20,	...	7	2	9	Adolescence.
„ 25,	...	2	—	2	
„ 30,	...	3	—	3	Early Maturity.
„ 35,	...	3	—	3	
„ 40,	...	—	—	—	
„ 45,	...	—	—	—	
„ 50,	...	3	—	3	Late Maturity.
„ 55,	...	1	—	1	
„ 70,	...	—	—	—	Post Maturity.
Totals,	...	26	8	34	

Thirty-eight per cent. of the cases were between the ages of 5 and 15.

The following table shows results of treatment according to the nature of the disease:—

	Quiescent.	Im- proved.	No Change.	Worse.	Died.	Total.
Bone, ...	6	2	—	—	—	8
Joints, ...	4	3	—	—	1	8
Peripheral Glands,	2	3	—	—	1	6
Abdomen, ...	—	3	—	—	1	4
Skin, ...	—	3	—	—	—	3
Spine, ...	1	1	—	—	—	2
Other Organs, ...	1	—	2	—	—	3
Totals, ...	14	15	2	—	3	34

Eighty-five per cent. of the cases discharged were either "quiescent" or "improved."

#### DURATION OF RESIDENCE.

			Under 4 Weeks.	4 Weeks and under 13.	13 Weeks and under 26.	26 Weeks and under 52.	52 Weeks and over.	Average duration of stay in days.
Bone,	...	...	—	—	1	3	4	381
Joints,	...	...	—	—	1	1	6	507
Peripheral Glands,	...	...	—	—	2	1	3	755
Abdomen,	...	...	—	—	—	3	1	340
Skin,	...	...	—	1	—	1	1	367
Spine,	...	...	—	—	—	—	2	605
Other Organs,	...	...	1	—	—	—	2	785
Totals,	...	...	1	1	4	9	19	

#### DURATION OF RESIDENCE IN DAYS.

		Average.	Maximum.	Minimum.
Men,	...	502	1,481	6
Women,	...	513	739	287
Boys,	...	597	1,998	137
Girls,	...	488	862	262

#### FAMILY HISTORY.

		Number of cases discharged.	Positive.	Percentage.
Men,	...	19	3	15
Women,	...	2	1	50
Boys,	...	7	2	28
Girls,	...	6	2	33
Totals,	...	34	8	23

## ORTHOPAEDIC DEPARTMENT.

This report was prepared by Dr. Alexander Smith, our Orthopaedic Surgeon.

## ORTHOPAEDIC WARD.

The demand for beds for orthopaedic cases has been as great as usual during the year, although, in 1937, 80 beds were available at Stonehouse, and 49 at Hairmyres. In the near future, more beds will be required if unnecessary delay in admission of patients is to be avoided, and if anything like adequate return is to be obtained from the elaborate new treatment block now in process of construction.

During 1937, 15 cases were admitted and 15 discharged. All of these suffered from tuberculous disease.

The discharges are tabulated below :—

## TUBERCULOUS DISEASE—15 CASES.

*Tuberculosis of Spine.*  
(2 Cases).

No. of Case.	Condition on Admission. Region Affected, etc.	Sex.	Age.	Duration of Illness in Years.	Treatment.	Result.	Residence in Days.	Remarks.
1	Extensive disease of 1st and 2nd lumbar vertebrae.	M.	25	1½	Recumbency. Celluloid jacket.	Quiescent.	584	—
2	Disease of 11th and 12th dorsal vertebrae and 1st lumbar vertebra with paravertebral abscess and paresis of lower limbs.	M.	34	2	Recumbency. Celluloid jacket.	Quiescent.	626	—

*Tuberculosis of Joints.*

(6 Cases).

No. of Case.	Condition on Admission. Region Affected, etc.	Sex.	Age.	Duration of Illness in Years.	Treatment.	Result.	Residence in Days.	Remarks.
3	Extensive disease of Rt. hip with abscess and sinus.	M.	10	6	Extension. Aspiration. Celluloid splint.	Healed.	460	Hip ank- ylosed.
4	L. Hip: Disease of femoral epiphysis. Deformity.	M.	13	$1\frac{1}{2}$	Extension. Correction of deformity. Celluloid splint.	Quiescent.	607	—
5	Disease of left hip with deformity and sinus.	F	13	1	Extension. Correction of deformity. Celluloid splint.	Quiescent.	596	—
6	Extensive disease of Rt. hip with sinus.	M.	45	28	Drainage, etc.	Improved.	367	—
7	Rt. Knee: Old disease of epiphyses of tibia and femur.	M.	17	2	Celluloid splint. Walking caliper.	Quiescent.	389	—
8	Rt. Elbow.	M.	18	1	Aspiration. Celluloid splint.	Quiescent.	121	—

*Other Bones.*  
(4 Cases).

No. of Case.	Condition on Admission. Region Affected, etc.	Sex.	Age.	Duration of Illness in Years.	Treatment.	Result.	Residence in Days.	Remarks.
9	Tuberculous left index finger.	M.	10	9	Operation. Ultra-Violet Light therapy.	Quiescent.	384	—
10	Tuberculosis of 1st metatarsal sinus.	M.	29	1½	Operation. Celluloid splint.	Quiescent.	537	—
11	Tuberculosis of sternum.	M.	18	½	Operation.	Quiescent.	108	—
12	Tuberculosis of Os Calcis.	F.	12	1	Celluloid splint, etc.	Healed	562	—

*Multiple Tuberculosis.*  
(3 Cases).

No. of Case.	Condition on Admission. Region Affected, etc.	Sex.	Age.	Duration of Illness in Years.	Treatment.	Result.	Residence in Days.	Remarks.
13	Tuberculous Peritonitis : Tuberculosis of ribs : Tuberculosis of spine with abscess.	M.	16	1	Aspiration. Recumbency.	Died.	574	Amyloid disease.
14	Disease of Rt. Hip Joint : Tuberculosis of spine with sinuses.	M.	52	2	General.	Died.	1,187	Amyloid disease.
15	Tuberculosis of Ankle ; Left wrist ; Spleen.	M.	47	4	General.	Improved.	323	Home at own request.

Two patients suffering from tuberculous disease of the spine were discharged during the year, both with their lesions quiescent and wearing celluloid jackets.

Six patients suffered from tuberculosis of the joints, four having lesions of the hip joint, one a lesion of the knee, and one a lesion of the elbow.

Three of the hip cases made good recoveries and were dismissed wearing celluloid splints, while one, a case of long standing, was improved after operative treatment.

The knee joint case also made a good recovery and was dismissed wearing a walking caliper splint.

The patient suffering from tuberculous disease of the elbow was discharged with his lesion quiescent and immobilised in a celluloid splint.

Three patients suffered from osseous lesions of the hands and feet. They all made quite good recoveries, but in two of them operative measures were necessary.

One other patient suffered from disease of the sternum which necessitated operation. He also was discharged with a healed lesion.

There were three patients suffering from multiple lesions. Two of them already had amyloid disease on admission, and, as was to be expected, died. The third was slightly improved.

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The verandahs are now complete and so the non-pulmonary patients are able to have a proper scheme of open-air treatment and heliotherapy carried out.

Since the treatment block is still unfinished, as in previous years only minor operative procedures such as the aspiration of abscesses, etc., were carried out at Hairmyres. When operation was necessary the patients had to be taken to Stonehouse, and all plaster casts and celluloid appliances were constructed there. Details of these are to be found in the Stonehouse report.



## GRADUATED LABOUR.

Of the 95 adult males discharged during the year, 18 registered for training. Eleven were physically unfit for systematic training, but were engaged in occupational therapy, and 66 were unfit to work without prejudice to their condition. The last figure represents 69 per cent. of the total number of patients discharged, and indicates the advanced type of disease that is being treated.

## NECESSITOUS CASES.

During the year, 25 cases were supplied with clothing and boots, as follows :—

		Cases.	Value.
County of Lanark,	... ..	22	£48 17 10
Other Authorities,	... ..	3	7 19 8

## WASSERMANN TEST.

A specimen of blood was taken from all adult patients on admission, with the undernoted result :—

Strongly positive—4.

This was equal to 3 per cent. of the adult admissions, and might be considered an average figure for a mixed urban and rural population.

## DENTAL CLINIC.

During the year, 128 adults and 28 children received treatment, as follows :—Extractions, 328 ; fillings, 76 ; scalings, 20.

These figures show an increase on last year, particularly in the number of extractions.

Our Dental Surgeon, Mr. Hutchison, visited the Colony once a fortnight.

In October it was decided to supply artificial dentures to necessitous cases where the Approved Society refused the application, or if the patient was not an insured person. This was a very important ruling and solved the problem of necessitous patients who, after a complete extraction, could not be supplied with a substitute.

## EYE CLINIC.

In February, Dr. John Mortimer, Hamilton, was appointed Consultant Oculist for the treatment of tuberculous complications of the eyes, including defective vision. Twenty-eight patients received treatment during the year.

In the new Treatment Block, the Oculist will share a room with the Laryngologist, and, with proper facilities, it is hoped to improve the Scheme. It has been arranged that cases from Stonehouse Orthopaedic Hospital shall be treated here. Approval has also been given for the supply of spectacles to necessitous cases where it has been found that these spectacles are necessary in order that full benefit may be derived from prolonged treatment.

## THROAT AND NOSE CLINIC.

Our Laryngologist, Dr. James Adam, attended once a fortnight during the year, particularly for the treatment of tuberculous laryngitis, and it was pleasing to record a considerable improvement in this intractable condition by means of cauterisation. This complication is, unfortunately, a feature of advanced tuberculosis, and, until comparatively recently, was considered to be incurable.

The undernoted treatment was carried out :—

Patient.	Disease.	Treatment.
J. M'G.	Atrophic Rhinitis.	Collosal Argentum injected.
J. C.	Do.	do.
M. C.	Do.	do.
R. S.	Do.	do.
R. D.	Lupus.	Cauterisation.
W. B.	Deflection of Septum.	Submucous Resection.
M. R.	Septic Tonsils.	Tonsillectomy.
E. C.	Do.	do.
C. M.	Do.	do.
S. K.	Ulcer of Soft Palate.	Cauterisation.
I. S.	Ulceration of vocal cords.	Cauterisation and ultra-violet light.
A. R.	Do.	Cauterisation.
B. C.	Do.	Ultra-violet light.
S. M'C.	Do.	Cauterisation and ultra-violet light.
J. H.	Do.	Cauterisation and ultra-violet light.
J. S.	Do.	Ultra-violet light.
W. M.	Do.	Cauterisation.
J. M'G.	Do.	Cauterisation and ultra-violet light.

Patient.	Disease.	Treatment.
R. P.	Ulceration of vocal cords.	Cauterisation and ultra-violet light.
M. C.	Do.	Ultra-violet light.
E. M.	Do.	do.
A. J.	Do.	Cauterisation and ultra-violet light.
P. M'A.	Do.	Ultra-violet light.
G. G.	Do.	do.
P. D.	Do.	do.
R. P.	Do.	Cauterisation and ultra-violet light.
D. L.	Do.	Superior Laryngeal Nerve injected with Novocaine and Alcohol.
E. M'C.	Otitis Media.	Ionisation.
J. K.	Do.	do.
S. M.	Do.	do.
D. M'G.	Do.	do.
F. M.	Do.	do.
M. C.	Do.	do.

### X-RAYS.

The work done in this Department showed a steady increase in spite of the fact that it was done under great difficulties and with very limited facilities. Fortunately, considerable progress was made during the year with the construction of the new X-ray Department. With an up-to-date powerful apparatus, we will have facilities for the proper diagnosis of all tuberculous conditions, a facility which, up to now, has been sadly lacking. A new development in X-ray has been the introduction of the Tomograph, an apparatus which is capable of photographing the lung in layers, and thus giving a true picture of the condition of the interior of the lung. Arrangements have been made to include this in the new equipment. Recently, considerable advances have been made in the equipment of the Developing Room, a department which hitherto seems to have been an afterthought. Without a well-equipped Developing Room, no matter how efficient the X-ray apparatus, the production of good X-ray films is a very difficult proposition. Advantage will be taken of these recent developments in our new department.

The following are the details of the work done during the year :—  
1,434 radiograms. The parts examined were as follows:—Lungs, 1,214 ; spine, 88 ; pelvis, 30 ; knee, 26 ; head sinuses, 14 ; ankle,

10; foot, 8; abdomen, 6 (barium enemata); elbow, 6; hand, 6; kidney, 4; shoulder, 4; mastoid, 2; rib, 2; forearm, 1.

Thirteen lipiodol injections were given for suspected bronchiectasis.

### ACTINOTHERAPY.

The ultra-violet rays, both natural and artificial, were again extensively used for the treatment of the non-pulmonary form of tuberculosis.

*Heliotherapy*.—This treatment was used as much as possible during the summer months whenever sunshine was available.

*Artificial Light*.—The equipment in this department was as follows:—4 carbon arc lamps (short-flame), 2 carbon arc lamps (long-flame), 1 K.B.B. atmospheric quartz mercury vapour lamp, 1 K.B.B. uviator air-cooled lamp, 1 Kromayer water-cooled quartz mercury vapour lamp.

Lesion.	Name.	Patient. Age.	Sex.	Duration of Illness.	Duration of Treatment.	*Lamp.	Result.
Glands.	J. L.	29	F.	1 month.	1 month.	{ S.F. U.V.	Cured.
	J. R.	15	M.	5 months.	5 months.	{ S.F. U.V.	Cured.
Glands with Discharging Sinus.	E.T.	19	M.	2 years.	34 months.	{ S.F. U.V.	Cured.
	W.H.	12	M.	2 months.	4 months.	{ S.F. M.V.	Cured.
	C.C.	5	F.	1 month.	2 months.	{ M.V. U.V.	Cured.
	M. K.	11	F.	1 year.	29 months.	{ S.F. M.V. L.F.	Cured.
Bone with Discharging Sinus.	T. L.	18	M.	4 months.	3 months.	{ S.F. M.V.	Cured.
	A. D.	19	M.	7 months.	5 months.	{ S.F. M.V.	Cured.
	J. C.	29	M.	18 months.	13 months.	{ M.V. U.V.	Cured.
Dactylitis.	K. S.	2	M.	1 month.	9 months.	M.V.	Cured.
Abdomen.	A. W.	11	F.	9 years.	12 months.	{ S.F. M.V.	Cured.
	C. P.	10	F.	8½ years.	10 months.	{ S.F. M.V.	Cured.
	B.M.	24	M.	6 months.	5½ months.	{ S.F. M.V.	Cured.
Fibroid Lupus.	J. C.	17	F.	17 years.	24 months.	{ S.F. M.V.	Cured.
	J.C.	45	F.	6 years.	36 months.	{ M.V. U.V.	Cured.

Lesion.	Name.	Patient. Age.	Sex.	Duration of Illness.	Duration of Treatment.	*Lamp.	Result.
Catarrhal Lupus.	{ J. C.	17	F.	12 years.	9 months.	{ S.F. M.V. U.V.	Cured.
Alopecia Areata.	{ M. S.	29	F.	1 year.	10 months.	{ U.V. M.V.	Cured.
Epididymitis.	G. G.	30	M.	6 months.	29 months.	{ S.F. L.F.	Cured.
Ulceration of Vocal Cords.	{ P. D.	33	M.	1 month.	3 months.	U.V.	Improved.
	{ B. C.	26	F.	2 months.	11 months.	Krom.	Improved.
	{ G. G.	22	M.	6 months.	2 months.	Krom.	Unsatis- factory.
	{ P. M'A.	36	M.	1 year.	18 months.	Krom.	Improved.
	{ A.R.	18	F.	1 month.	4 months.	Krom.	Cured.
	{ J.S.	27	M.	1 year.	11 months.	{ Krom. U.V.	Improved.
	{ E. M.	28	F.	1 year.	4 months.	{ Krom. U.V.	Cured.
	{ A. J.	15	F.	2 months.	6 months.	{ Krom. U.V.	Improved.
	{ S. M'C.	24	M.	2 months.	6 months.	{ Krom. U.V.	Cured.
	{ R.P.	45	M.	1 year.	6 months.	{ Krom. U.V.	Improved.

At the end of the year, 4 males and 8 females were still undergoing treatment.

*Out-Patients.*—The following table shows details of out-patients treated during the year. At the end of the year, 3 males and 4 females were still undergoing treatment.

Lesion.	Name.	Patient. Age.	Sex.	Duration of Illness.	Duration of Treatment.	*Lamp.	Result.
General Debility.	A. H.	5	M.	1 year.	8 months.	M.V.	Cured.
Nasal Fissure.	G. B.	38	M.	1 year.	8 months.	{ M.V. Krom.	Improved.
Bronchial Asthma.	W. R.	5	M.	7 months.	24 months.	M.V.	Cured.
Tonsillitis.	H. R.	4	M.	6 months.	3 months.	{ M.V. Krom.	Cured.
Ulceration of Vocal Cords.	{ M. T.	27	F.	6 months.	10 months.	{ Krom. R.H.	Cured.

\*S.F. = Short Flame.

L.F. = Long Flame.

Krom. = Kromayer.

M.V. = Mercury Vapour.

U.V. = Uviator.

R.H. = Radiant Heat.

Seventy-six per cent. of the cases after treatment were classified as "cured," a result which could not be obtained by any other form of treatment.

The average number of treatments given per month was 459. The total number given by the different lamps was as follows:—Short-flame arc, 2,636; long-flame arc, 688; mercury vapour, 855; uviator, 725; Kromayer, 353. The increase in the number of treatments with the Kromayer lamp was due to the extensive employment of ultra-violet rays in tuberculous laryngitis.

*Radiant Heat.*—The total number of treatments given was 251. The K.B.B. Gallois infra-red radiation projector was used for various conditions requiring counter irritation.

The undernoted table gives details of the cases treated:—

Lesion.	Name.	Patient. Age.	Sex.	Duration of Illness.	Number of Treatments.	Result.
Lumbago.	{ W. B.	23	M.	3 weeks.	12	Cured.
	{ H. C.	36	F.	1 year.	23	Cured.
	{ P. R.	24	M.	1 week.	6	Cured.
	{ W. B.	27	M.	4 days.	12	Cured.
Arthritis.	J. B.	53	M.	1 month.	16	Cured.
Pleurodynia.	{ P. D.	50	M.	2 weeks.	32	Cured.
	{ M. O'K.	42	M.	10 days.	8	Cured.
Rheumatism.	{ T. C.	40	M.	7 days.	22	Cured.
	{ D. F.	40	M.	2 weeks.	45	Cured.
	{ T. P.	42	M.	2 weeks.	36	Cured.
	{ O. C.	22	M.	4 weeks.	32	Cured.
Throat Condition.	R. P.	45	M.	1 year.	55	Cured.

#### ARTIFICIAL PNEUMOTHORAX.

The treatment of pulmonary tuberculosis by collapse therapy is now recognised to be of primary importance and has greatly improved the patients' outlook. Unfortunately, only a limited number of patients were suitable for this treatment owing to the formation of pleural adhesions. However, with the facilities which will be available in our new Treatment Block for the cutting of these adhesions, etc., it is hoped the result will be found more satisfactory.

Again one has to record the striking effect that artificial pneumothorax has on the infectious sputum. This year the sputum of 80 per cent. of the patients became negative for tubercle bacilli. It is interesting to note that, although we have four times the accommodation for male patients that we have for female, the number of each sex receiving treatment was about the same. Although considering the limited number of patients treated it was difficult to dogmatise, yet one would be inclined to conclude that



female patients were admitted in a more suitable condition for this treatment. At any rate, one could express the opinion that they seemed to have fewer pleural adhesions.

Including inductions and refills 463 injections were given. Eighteen cases attended as out-patients. This was a very pleasing feature as it enabled the majority of these patients to carry on routine work and thus solved the economic problem. It also indicated a saving in the cost of sanatorium treatment which these patients would otherwise have required.

### GOLD.

This drug was used for the treatment of selected cases. The results were somewhat doubtful, although a limited number of patients appeared to derive some benefit. This treatment is not so popular as it was, a feature which is rather to be recommended, and indicates that we are now realising that it is not a drug which can be used indiscriminately, but only for very selected cases. The patients were probably very much to blame for its excessive use. They realised it to be a definite form of treatment and felt they were being neglected if they did not receive it. Repeatedly, one was asked to give Gold treatment to patients who were obviously not suitable cases. The preparation used was Solganal B. Oleosum given intramuscularly in doses varying from 0.01 gm. to a maximum of 0.2 grms. Thirteen patients were treated, and altogether received 43.926 grms., the amount of Gold in each case varying from 4 to 7 grms.

### BODY WEIGHT.

#### PROGRESS OF PATIENTS IN RESIDENCE DURING THE YEAR.

Total number of patients treated, ... ..	279
Number of patients who gained weight, ...	205
Number of patients who lost weight, ...	17
Number of patients who remained <i>in statu quo</i> , ...	2
Number of patients who were not weighed, ...	23
Number of patients who died, ... ..	32
<hr/>	
Total number of patients discharged during the year, ...	128
Number of Pulmonary Cases, ... ..	100
Number of Non-pulmonary Cases (excluding	
Orthopaedic), ... ..	19
Number of Non-tuberculous Cases, ... ..	9
<hr/>	

For the 205 patients who gained weight, the average gain is 13 lbs. 1 oz. The greatest gain in weight is 70 lbs. The lowest gain in weight is 2 ozs. For the 17 patients who lost weight the average loss is 5 lbs. 9 ozs. The greatest loss recorded is 22 lbs.

Taking the patients who were discharged during 1937, 101 gained in weight, 8 lost in weight, and 19 were not weighed. Of those who gained the average gain is 14 lbs. 11 ozs. The average net gain in weight of patients discharged is 12 lbs. 13 ozs.

TABLE I.  
RELATION BETWEEN LENGTH OF STAY AND NET GAIN IN WEIGHT.

	Under 1 mth.	Between 1-2 mths.	Between 2-3 mths.	Between 3-6 mths.	Between 6-9 mths.	Between 9-12 mths.	Over 12 mths.	Total.
(1) Patients gaining Weight,	...	9	5	10	28	26	25	102
(2) Patients losing Weight, ...	...	—	—	1	3	2	2	9
(3) Patients <i>in statu quo</i> , ...	...	—	—	—	—	—	—	2
(4) Patients not weighed, ...	...	7	3	3	3	—	—	7
(5) Patients died, ...	...	8	3	2	4	5	2	8
	24	11	16	38	33	29	128	279
Average net gain (1) and (2),	...	{ 6 lbs. 7 ozs.	6 lbs. 3 ozs.	6 lbs. 2 ozs.	13 lbs. 3 ozs.	8 lbs. 10 ozs.	9 lbs. 3 ozs.	13 lbs. 12 ozs.

TABLE II.  
AVERAGE NET GAIN IN WEIGHT ACCORDING TO CLASSIFICATION.

	Stage I. Spit—	Stage II. Spit—	Stage III. Spit—	Stage I. Spit+	Stage II. Spit+	Stage III. Spit+	Other forms of Tuber- culosis.	Non- Tuber- culous.	Total.
(1) Patients gaining weight, ...	12	15	4	11	38	72	45	8	205
(2) Patients losing weight, ...	—	—	—	—	5	9	3	—	17
(3) Patients <i>in statu quo</i> , ...	—	—	—	—	—	—	2	—	2
(4) Patients not weighed, ...	2	1	—	1	2	13	4	—	23
(5) Patients died, ...	—	—	—	—	2	26	1	3	32
	14	16	4	12	47	120	55	11	279
Average net gain (1) and (2), ...	{ 15 lbs. 8 ozs.	18 lbs. 3 ozs.	14 lbs. 6 ozs.	10 lbs. 6 ozs.	10 lbs. 7 ozs.	8 lbs. 5 ozs.	14 lbs. 3 ozs.	20 lbs. 15 ozs.	

The grading used is the Turban-Gerhardt classification. Other forms of tuberculosis in above table include abdominal tuberculosis, glandular tuberculosis, lupus and some orthopaedic conditions.

### BLOOD SEDIMENTATION REACTION.

This reaction continues to become with each successive year more firmly established as a dependable measure for the assessment of clinical condition and by aggregation of prognosis. Its application is now, therefore, adopted in all cases, both on admission and thereafter at each subsequent routine examination, since by its aid it is possible to prepare coherent consecutive records of the progress of each case towards completion of treatment, and to assess the degree of involvement of the lungs.

As in previous years, the technique of Westergren is followed, in which one reading is made an hour subsequent to the setting up of the pipette. Using the normal readings of 1-3 for males and 4-7 for females, and an arbitrary classification of recorded rates suggested by a review of cases, the following results may be tabulated:—

TABLE I.  
CLASSIFICATION OF SEDIMENTATION RATE WITH TYPE OF LESION.

Lesion.	SEDIMENTATION RATE.				Totals.	Percentage of cases in various groups.
	1-3	4-20	20-40	Over 40		
Pulmonary—Spit Negative—						
Stage I, ...	6	8	—	—	14	6·09
Stage II, ...	4	5	6	—	15	6·52
Stage III, ...	—	1	1	1	3	1·30
Pulmonary—Spit Positive—						
Stage I, ...	4	5	1	1	11	4·78
Stage II, ...	—	20	10	15	45	19·56
Stage III, ...	2	27	32	48	109	47·41
Pulmonary Totals, ...	16	66	50	65	197	85·66
Glands, ...	3	1	—	—	4	1·74
Lupus, ...	1	6	—	—	7	3·04
Bone, ...	3	8	—	1	12	5·22
Abdomen, ...	—	—	1	2	3	1·30
Other Regions, ...	2	3	2	—	7	3·04
Totals, ...	25	84	53	68	230	
Percentage of cases in various blood sedimentation groups,	10·87	36·53	23·04	29·56		

It is evident from perusal of the above table that the Sedimentation Rate in cases other than pulmonary is relatively low. On consideration of pulmonary cases alone, it is clear that spit negative cases have a lower sedimentation rate than spit positive cases, and, moreover, Stage III of the spit positive group has, without doubt the highest sedimentation rate, a fact which agrees with the clinical findings. These figures emphasise the importance of the sedimentation rate in assessing the degree of involvement of the lungs apart from its usefulness in prognosis.

TABLE II.  
CLASSIFICATION OF SEDIMENTATION RATE INCIDENCE  
AMONG PULMONARY CASES ONLY.

Pulmonary Cases.	0-	10-	20-	30-	40-	50-	60-	70-	80-	90-	100-	110-	Total Cases.
Spit Neg. { Stage I, ...	12	2	—	—	—	—	—	—	—	—	—	—	14
{ Stage II, ...	8	2	2	4	—	—	—	—	—	—	—	—	16
{ Stage III, ...	2	—	1	—	—	—	1	—	—	—	—	—	4
Spit pos. { Stage I, ...	7	2	1	—	—	—	—	—	1	—	—	—	11
{ Stage II, ...	10	9	8	3	6	4	3	1	1	—	—	—	45
{ Stage III, ...	11	14	14	22	10	9	12	7	3	3	1	1	107
													197

The above table confirms the fact that the highest sedimentation figures are found in cases of Stage III spit positive grouping where there is the most widespread involvement of the lungs associated with activity.

TABLE III.  
SEDIMENTATION RATES OF VARIOUS CLASSIFICATIONS  
OF PULMONARY TUBERCULOSIS.

Classification.	Number of Cases.	Mean S.R. on Admission.
Pulmonary—Spit negative cases—		
Stage I, ...	14	8.79
Stage II, ...	16	23.88
Stage III, ...	4	36.25
Pulmonary—Spit positive cases—		
Stage I, ...	11	16.45
Stage II, ...	45	30.36
Stage III, ...	107	40.35
Total,	197	33.07

From consideration of the above table, the mean sedimentation rate of all pulmonary cases on admission is calculated to be 33·07. On the other hand, the mean sedimentation rate of all types of cases is 30·18.

The mean sedimentation rate of all cases discharged is found to be 19·05, this figure being partially accounted for by the proportion of patients who leave the institution against medical advice. This is further borne out by the fact that the mean sedimentation rate of those patients discharged on completion of treatment is found to be 5·37, a figure very much lower than the mean sedimentation rate of patients on admission, viz., 30·18.

The mean sedimentation rate of all deaths was 61·71.

### LABORATORY.

This department has now been in operation for a complete year, and it is possible to give completed figures showing the routine work done.

No. of Sputum Examinations, ... ..	1,597
Positive, ... ..	885
Negative, ... ..	712
<hr/>	
Special Sputum Examinations (Antiformin), ... ..	12
Blood Sedimentation Tests, ... ..	1,430
Blood Films, ... ..	150
Pleural Fluids, ... ..	3
Special Urine Examinations, ... ..	698

Regarding the sputum examinations, the procedure was as follows :—If the first examination of the sputum failed to reveal the presence of tubercle bacilli, a consecutive series of 12 sputa was examined daily before specimen was sent to the County Laboratory for culture or biological tests. The bacteriological reports of the sputum examinations were based on the following counts per microscopic field.

1 to 2, ... ..	+ very scanty.
3 to 4, ... ..	+ scanty.
Up to 5, ... ..	+
5-10, ... ..	++
10-20, ... ..	+++
20 or over, ... ..	Abundant.



## ACCOMMODATION.

During 1937, the Colony had accommodation for 240 patients as follows :—

*Pulmonary and Non-pulmonary Section—*

Pavilion I—Adult Males, ... ..	84	
Pavilion II—Adult Males, ... ..	50	
Boys, ... ..	15	
	—	65
Pavilion III—Women, ... ..	26	
Girls, ... ..	4	
	—	30
Observation—Adult Males, ... ..	11	
	—	190

*Orthopaedic Section—*

Pavilion II—Males, ... ..	15	
Pavilion III—Males, ... ..	22	
Females, ... ..	13	
	—	35
	—	50
Total, ... ..	240	

## STAFF.

At the end of the year the Medical Staff was as follows :—

Physician-Superintendent.	Consultant Laryngologist.
Orthopaedic Surgeon.	Consultant Dentist.
Two Assistant Physicians.	Consultant Oculist.

The Institution Staff included the following :—

Matron, ... ..	1	Typist, ... ..	1
Assistant Matron, ... ..	1	Clerks, ... ..	2
Sisters, ... ..	7	Instructors, ... ..	4
Staff Nurses, ... ..	5	Electric Power Station,	6
Nurses, ... ..	31	Handyman, ... ..	1
Maids, ... ..	48	Attendant, ... ..	1
School Teachers, ... ..	3	Porter, ... ..	1
Supervisor, ... ..	1		
		Total, ... ..	113

## SCHOOL.

Our three teachers were responsible for the education of our children, both in the open-air school and in the wards of the orthopaedic department. Although there was a reduction in the number of pupils attending the former, this was more than balanced by the increased number of pupils requiring individual attention in the wards. This individual teaching takes up a good deal of the teachers' time, but the results more than justify the time taken. Children confined to bed look forward to the teachers' visit, and it greatly relieves the somewhat dull monotony of rigorous bed confinement.

The average number of children attending school was 31. This number will show an increase when more accommodation is arranged for orthopaedic cases.

This year Miss Hornby, our School Supervisor, taught handwork to the children confined to bed. For the first time, our senior pupils were taught algebra, geometry and French.

## RECREATION.

The usual facilities were available for patients' recreation, our well-equipped Recreation Hall being in constant use.

Arrangements for outdoor recreation consisted of a golf course, putting green, and croquet lawn.

*Wireless.*—The wireless installation was completed by the wiring of the Observation Pavilion and Pavilion I, and now every bed in the Institution has a headphone. The total cost of the installation was £616. The money has been well spent, and it is pleasing to report that it has not cost the ratepayers a single penny.

Recreation takes a very important place in the treatment of tuberculous patients, and with the above facilities it is considered that we are well equipped in every respect. Our thanks are due to the undernoted kind friends who so generously provided entertainments during the session :—

Mr. Campbell's Party, Glasgow.

Dundas-Buchanan Variety Players, Glasgow.

The Embassy Players, Rutherglen.

Larkhall Continuation Class Choir.  
 Merrymakers' Concert Party, Hallside.  
 Rosebank Church Junior Choir, Cambuslang.  
 St. Charles' School, Newton.  
 The Street Singers, Glasgow.  
 Mr. Thomson's Concert Party, Cambuslang.

*Religious Services.*—Regular services were held in the Recreation Hall, the undernoted clergymen very kindly giving their services voluntarily :—

Rev. D. C. Alexander, Eaglesham.  
 Rev. John Anderson, Carmunnock.  
 Rev. Vernon Clarke, East Kilbride.  
 Rev. J. A. Cowley, Clarkston.  
 Rev. N. V. Hope, Busby.  
 Rev. T. K. Johnstone, East Kilbride.  
 Rev. Father Kennedy, Clarkston.  
 Rev. J. G. Liddell, East Kilbride.  
 Rev. D. L. Seath, Eaglesham.  
 Rev. N. S. Boyd Scott, East Kilbride.  
 Rev. A. M. Wright, Busby.

#### BUILDINGS AND GROUNDS.

Extensive general repairs were carried out by the County Works Department, the largest items being renewing wash-hand basins in the various pavilions, and building new ventilator windows at Institution kitchen.

Under the scheme of reconstruction, extensive alterations were carried out to the Observation Pavilion and Pavilion I. These alterations were of a similar nature to those undertaken at Pavilions II and III last year, and fully described in the Report for 1936.

The most important event of the year was the opening of our new Nurses' Home in October by Mr. William S. Douglas, Secretary to the Department of Health for Scotland. The following information is taken from the programme issued in connection with the opening ceremony :—

“ The new building, for which the foundations were laid about two years ago, provides accommodation designed to supply the most modern requirements for the comfort and welfare of the nurses. The Nurses' Home occupies a commanding site to the west of the Main Avenue, and is placed with its long axis running north and south, so that practically every room will get sunlight at some part of the day. The Main Entrance is to the east and is reached from a subsidiary carriageway which is formed right round the building. The Entrance Hall is of good proportion, and from it the main staircase rises to the various floors. Corridors lead on the left to the Public Rooms and on the right to the Sisters' Rooms. The staircase and the floors of the Entrance Hall are finished in terrazzo. The dado of the staircase and the corridor walls are also in terrazzo in a colour scheme of light cream and green with a black cove at floor. The upper walls and ceilings are primrose, and the woodwork stained walnut. The corridor floors are laid with Granwood blocks to make a quiet floor for traffic. The main Public Room is a Recreation Room which is separated from the Lecture Room by a folding partition. Both rooms are floored with oak, and the walls panelled with oak plywood. The Lecture Room for the teaching of the nurses contains a platform with demonstration table and equipment, which ranges from the ancient skeleton to the modern epidiascope. At the south-east corner of this floor a suite of rooms is provided for the Assistant Matron. The north section of this floor contains eight Sisters' bedrooms and a Sisters' sitting room. The bedrooms have the walls and ceilings painted cream with silver grey woodwork. Each room has a fitted wash-hand basin and a built-in wardrobe and box press. Other accommodation on this floor is a Service Pantry and Interview Room adjoining the Entrance Hall, and a cloakroom for nurses beside the side entrance.”

“ The first and second floors contain the bedrooms for nurses, with toilet rooms, box rooms, linen rooms, and bedrooms for sisters in charge. Each bedroom has a wash-hand basin, a built-in wardrobe, and is finished with a neat suite, consisting of bed, dressing chest, and side table. Variety has been given to the colour decoration.

Some bedrooms are finished with stippled cream walls with window and door frames picked out in green and silver grey wood. Others have beige walls and magenta frames and white woodwork.

“ On the second floor provision has been made for illness, and a suite of three rooms forms a sick bay.

“ At the roof level in the centre of the building a gymnasium has been formed with up-to-date equipment for the use of the nurses.

“ The main roof is flat and forms a useful adjunct for relaxation in the sun or for viewing the surrounding countryside.

“ The structure is of fire-resisting construction, is centrally heated, and lighted by electricity.

“ The total cost, inclusive of furnishing, is approximately £30,000.”

Considerable progress was made with the erection of the Treatment Block, and it is hoped to give full details in the next annual report.

Photographs showing (1) Pavilion III with recently erected verandah; (2) Nurses' Home; (3) Gymnasium in Nurses' Home; and (4) Lounge in Nurses' Home are inserted.

#### METEOROLOGICAL REPORT.

##### I. RAINFALL.

Month.	Depth in Inches.	Month.	Depth in Inches.
January, ... ..	2.17	July, ... ..	1.93
February, ... ..	4.60	August, ... ..	2.78
March, ... ..	.80	September, ... ..	2.83
April, ... ..	1.90	October, ... ..	3.76
May, ... ..	1.38	November, ... ..	1.3
June, ... ..	1.15	December, ... ..	2.5
Total rainfall for year,			<u>27.10</u>

This shows a decrease of 13.86 inches on previous year.



PAVILION III

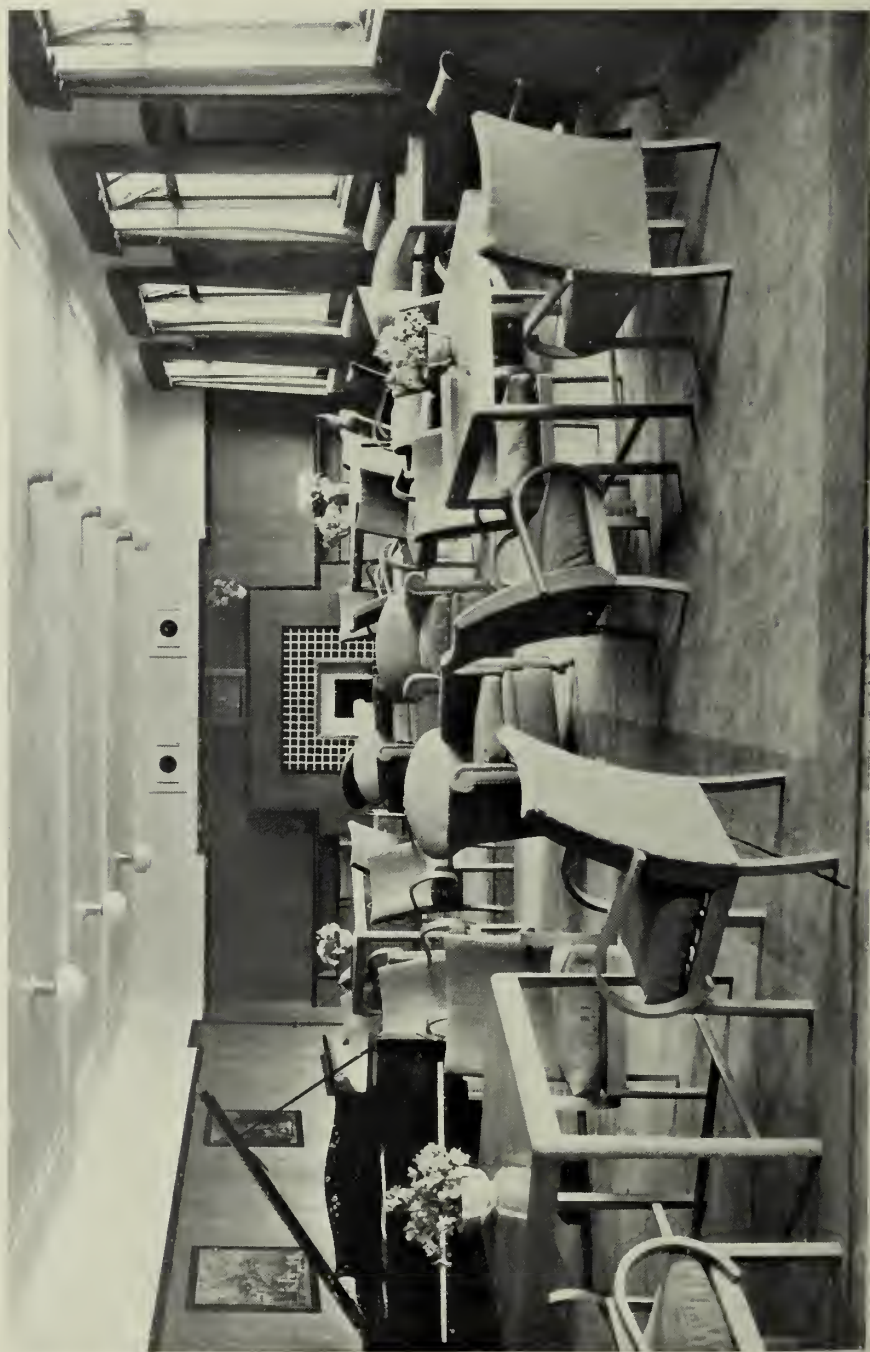




NURSES' HOME



NURSES' HOME—GYMNASIUM



NURSES' HOME—LOUNGE

During the year there were 203 completely dry days, being 12 days less than last year.

## II. WINDS.

North, ... ..	24	South, ... ..	48
North-East, ... ..	29	South-West, ... ..	44
East, ... ..	71	West, ... ..	102
South-East, ... ..	13	North-West, ... ..	30
South-South-East, ... ..	2	North-North-West, ... ..	2
	<u>139</u>		<u>226</u>

## III. TEMPERATURE.

	Highest Reading.	Lowest Reading.	Mean.
January, ... ..	48	27	37.5
February, ... ..	50	26	38
March, ... ..	53	20	36.5
April, ... ..	63	32	47.5
May, ... ..	70	36	53
June, ... ..	71	33	52
July, ... ..	80	41	60.5
August, ... ..	84	41	62.5
September, ... ..	67	34	50.5
October, ... ..	63	29	46
November, ... ..	58	24	41
December, ... ..	50	12	31

The mean temperature for the year was 46.

## COLONY DEPARTMENTS.

The training conditions in all departments were similar to those of previous years, the patients being trained by experienced instructors. The working hours per day varied from two to six, according to the patient's physical condition.



## GARDENS.

The upkeep of the grounds is a very important part of the duty of the staff. These grounds are very extensive compared with other sanatoria, and naturally the cost of upkeep is greater. All the garden produce was sent to the Institution kitchen, and the flowers were distributed to the various wards. Any surplus was sent to market or sold privately. We again had a good tomato crop free from disease. The work of the patients in this department is classified as occupational therapy. It was almost entirely reserved for female patients, thus solving one of the problems of finding work for this class in a mixed colony. Ten patients were enrolled. The staff at the end of the year consisted of a head gardener, inside and outside foremen, 4 under-gardeners and a carter.

## FOREST NURSERY.

This department undertook a considerable amount of work for the County Council, particularly the Housing, Highways and Public Parks Departments, *e.g.*, supplying and planting hedges at the various housing schemes; planting trees and shrubs on the main arterial roads; and supplying trees to the various public parks. It is quite evident that this department is becoming of increasing value to other County schemes. This year the demand for roses exceeded the supply. Four patients enrolled for training. The staff at the end of the year consisted of a head forester, foreman forester, 4 under-foresters, and a carter.

## POULTRY FARM.

The work in this department is very suitable for tuberculous patients. It is an open-air occupation, and the duties are not too arduous. Poultry-farming can be considered as both occupational therapy and vocational training. There is a certificated poultry-maid in charge, and the patients work in relays, thus ensuring constant supervision of the poultry. The patients do not require to be on duty more than three hours per day. During the year, 21 patients enrolled for training.

During 1937, 1,264 chicks were hatched, the fertility being 82 per cent., and the hatchability 95 per cent. In October, 1937, 200 day-old chicks were purchased from England, and on January 10th the first consignment was sold as milk-fed spring chickens.

The demand for table birds has been steadily increasing to provide light diet for patients, and, during the year, 1,314 fowls were sold.

Thirty-five day-old turkeys were purchased, it being found cheaper to do this than to buy eggs of uncertain fertility. Thirty-two poults were reared to maturity at a cost of 6s. per bird, and sold in December at £1 15s., the average weight being 21 lbs.; therefore, after initial and food costs were deducted, the profit per bird was £1 5s. 3d.

In September, thirty-six single-cage hen batteries were installed as an experiment, and have been highly successful. Rhode Island Reds were used on account of their docility, and several of the birds laid three 2.25 oz. eggs per diem, and, during one day in late December, 44 eggs were laid by 36 hens.

The stock at the end of the year consisted of 3 cocks, 50 cockerels, 488 hens, 277 pullets, 240 chickens, 51 ducklings—total, 1,109 fowls—an increase of 107 on the previous year.

#### PIGGERY.

Our new piggery has fully justified its erection. The sales amounted to £815 3s. 8d. The pigs were sold at the various local auction marts. At the end of the year the stock numbered 167.

This department was under the supervision of the Farm Manager, and five patients enrolled for training.

#### GUINEA-PIG DEPARTMENT.

Owing to the suggestion that a new house be erected and guinea-pigs bred on a large scale, the work in this department was somewhat curtailed. In the meantime no progress has been made in the scheme, and it is hoped that something will be done in the near future as the present accommodation is dilapidated.

The department was again successfully run by a patient. The stock was healthy and showed no evidence of disease.

Sold to County Laboratory—120.

Stock at end of year—25.



## FARM.

The stock is a pedigree Ayrshire herd, and this year it was classified as an attested herd, the object being to increase the value of our young stock when sold. The average figure for the routine veterinary inspection was 97 per cent., a similar figure to last year. All the milk produced was purchased by the Institution, none being retailed. Any surplus milk was made into butter. Being members of the Scottish Milk Records Association, the milk production was regularly tested by the official tester, and the figures were as follows:—The average milk yield for the whole herd was a record, namely, 1,020 gallons at 3·94 per cent. butter fat in 47 weeks. Among the cows the best yield was 1,524 gallons at 3·83 per cent. butter fat in 56 weeks; in the heifers the best was 1,284 gallons at 3·67 per cent. butter fat in 58 weeks. These results were excellent and reflected great credit on the farm staff. Bacteriological examination of the milk showed 1,640 blood heat organisms per c.c., and no coliform bacilli in one-hundredth of a c.c.

The following were the awards gained at the various cattle shows:—

1st.	Pair of 1-year old Heifers.	East Kilbride.
2nd, 4th and 5th	1-year old Heifers.	do.
1st.	Pair of 1-year old Heifers.	Strathaven.
1st, 2nd and 3rd.	1-year old Heifers.	do.
1st.	Calf.	do.
1st and 3rd.	1-year old Heifers.	Hamilton.
1st.	2-year old Heifer.	do.
1st, 2nd and 3rd.	1-year old Heifers.	Chapelton.
1st.	Pair of 1-year old Heifers.	do.
2nd.	2-year old Heifer.	do.
1st and 4th.	Calves.	do.

Our stock is becoming better known and the sale of year-old bulls continued to be a considerable source of profit to the farm. Altogether during the year we sold seven bulls, the highest figure being 32 guineas at the Lanark Bull Sale. One bull went to Kenya Colony.

During the year the crops maintained the high standard of the previous year, hay and oats in particular being very heavy crops. Turnips were sound, but the season was not so favourable for potatoes, the wet fall and the retentive nature of the heavy clay soil, rendering the lifting of the crop difficult.

The staff consisted of Farm Manager, dairymaid, byreman, assistant byreman, 2 ploughmen, 2 outdoor workers and 1 milker.

The stock at the end of the year was as follows :—2 stock bulls, 3 bull stirks, 4 bull calves, 38 cows, 24 heifers, 11 heifer calves, 6 work horses.

### INSTITUTION WORKSHOP.

This department was in the charge of our handyman, being responsible for all the minor Institution repairs. It has effected a considerable saving in maintenance costs, undertaking work which would otherwise have been done by outside contractors. One has again to complain of the lack of proper accommodation for carrying out the work. It has been suggested that a new workshop be constructed along with the guinea-pig house.

Whenever possible, we employ patients in this department who had some previous experience of joiner and paintwork. Six patients enrolled during the year.

### GARAGE.

All the work in this department was undertaken by trainees under the supervision of our Motor Instructor. The work done by these trainees was a good example of what can be done by a colony scheme. These men were performing duties which otherwise would have been undertaken by two full-time chauffeurs. So far our ambulance work has been done by old ambulances discarded by other County Institutions. Considering the amount of work done, the question of the purchase of an entirely new ambulance will have to be considered in the near future.

## INDUSTRIAL WORKSHOPS.

These workshops have been fully described in previous reports. They take an important part in the rehabilitation of tuberculous patients. Owing to the advanced type of patient admitted to the Colony it has been somewhat difficult to keep the shops fully manned. To overcome this difficulty a certain proportion of beds should always be reserved for patients suitable for vocational training.

The patients were afforded an opportunity of obtaining training in basket-making, boot-repairing, cabinetmaking and motor driving. There was a fully qualified instructor in charge of each department. On the commercial side it is pleasing to record that the receipts total over £1,000. All the departments were fully employed during the year. It is interesting to note that all the basket work in the new Nurses' Home was made in our own workshop. A considerable amount of work was done for the various County Institutions.

Fifty-four patients, compared with 55 last year, enrolled for training, as follows :—

Basketmaking Department,	...	...	18
Boot-repairing Department,	...	...	6
Cabinetmaking Department,	...	...	14
Motor Department,	...	...	16

Hairmyres Colony,  
May, 1938.

## COUNTY ORTHOPAEDIC HOSPITAL, STONEHOUSE.

### REPORT BY MEDICAL SUPERINTENDENT.

*Medical Superintendent*—ALEXANDER SMITH, M.B., Ch.B.

*Visiting Physician*—ALEXANDER M'LEAN, M.B., Ch.B.

*Matron*—Miss H. J. MORE.

#### ADMINISTRATION.

There were available for orthopaedic cases during 1937 some eighty beds at Stonehouse and fifty at Hairmyres, a total of 130 in all as in the previous year. This total again proved inadequate to take all the cases without a number of them having an unduly long time to await admission. There has as a result been the usual harassment for the administration and anxiety on the part of the patients and their relatives. Once the new treatment block is completed at Hairmyres it will doubtless be possible to have more accommodation made available for orthopaedic and non-pulmonary cases there both to relieve the waiting list and to utilise to the full the new facilities offered.

During 1937 the average number of beds occupied was 78. The number never fell below 73 and sometimes reached 82. An effort will be made in future not to exceed 80 at any time, and, if possible, to keep a lower figure at most times.

Some notable alterations have been made during the year. Our own old electricity generating plant has been scrapped and the Clyde Valley Supply taken. The entire institution has now been wired for electricity, whereas formerly, apart from the Treatment Block and one small part of the administrative building, gas was used. The change to alternating current also meant the re-equipment of parts of the Treatment Block. A new mobile X-ray unit by the General Radiological Company has been obtained. The plant in the Ultra-Violet Light Room has also been renewed. It now consists of two 30-amp. Carbon Arc Lamps, one Duo-Therapy Lamp, and one Alpine Sun Lamp. The Pantostat was also exchanged. The equipment of the Treatment Block, though of a modest and inexpensive nature, is, therefore, now thoroughly up-to-date and satisfactory for the scope of work the institution is likely to undertake.

The kitchen, one of the most antiquated parts of the institution, is in process of enlargement and modernisation. It is to be electrified. This will be a great advance. In addition a new dining room is being provided for the maids. The alterations have been designed to make the institution a useful unit no matter what its ultimate destiny.

**STAFF.**—*The Medical Staff* during 1937 consisted, as before, of a resident superintendent who carries out the treatment, including practically all the operative work, and a visiting doctor whose chief duty was the administration of anaesthetics. Since the Superintendent of Stonehouse is also Visiting Orthopaedic Surgeon to Hairmyres, some reorganisation of this staff is likely in the near future.

The visiting dentist gives treatment in his department at regular intervals.

The *Nursing Staff* consists of a matron, 5 trained sisters, and 17 probationers; *Clerical Staff*—1 clerkess, full-time, non-resident; *Teaching Staff*—1 full-time, non-resident, female teacher; *Domestic Staff*—1 cook, 2 laundrymaids, and 12 maids; *Outdoor Staff*—2 engineers, 2 gardeners, and 1 fireman.

### Patients.

The work of the indoor and the outdoor departments are, as in former reports, classified separately.

#### Indoor Patients.

During the year a total of 119 patients were admitted under my care and 124 discharged. They were divided between Stonehouse and Hairmyres as follows:—

	Admitted.	Discharged.
Hairmyres Orthopaedic Section, ...	15	15
Stonehouse, ... ..	104	109

The notes of the Hairmyres cases have been incorporated in the general report for that institution, which should be considered in conjunction with this report.

The 109 patients dismissed from Stonehouse are classified according to place of residence, and age and sex distribution in Tables I and II.

TABLE I.

## PLACE OF RESIDENCE.

Avondale, ...	...	...	...	1	Douglas, ...	...	...	...	1
Blantyre, ...	...	...	...	6	East Kilbride, ...	...	...	...	1
Bothwell, ...	...	...	...	29	Glassford, ...	...	...	...	2
Cadder, ...	...	...	...	6	Hamilton, ...	...	...	...	1
Cambuslang, ...	...	...	...	11	Lesmahagow, ...	...	...	...	7
Cambusnethan, ...	...	...	...	7	New Monkland, ...	...	...	...	3
Carluke, ...	...	...	...	2	Old Monkland, ...	...	...	...	7
Carnwath, ...	...	...	...	1	Rutherglen, ...	...	...	...	2
Carstairs, ...	...	...	...	3	Shotts, ...	...	...	...	4
Dalserf, ...	...	...	...	10	Stonehouse, ...	...	...	...	4
									108
					Burgh of Lanark, ...	...	...	...	1
					Total, ...	...	...	...	109

TABLE II.

## AGE AND SEX DISTRIBUTION.

Quinquennial Periods.	Males.	Females.	Both Sexes.	Age-Groups.	Tuber- culous.	Non- Tuberculous.
— 5	5	6	11	Pre-School,	7	4
— 10	19	10	29	School Age,	29	—
— 15	9	8	17		14	3
— 20	6	8	14	Adolescent,	12	2
— 25	2	7	9		9	—
— 30	4	5	9	Early Maturity,	9	—
— 35	3	1	4		3	1
— 40	2	3	5		5	—
— 45	2	1	3		3	—
— 50	2	1	3	Late Maturity,	2	1
— 55	—	—	—		—	—
— 60	2	1	3		2	1
— 65	2	—	2		2	—
				58	51	109
				97	12	

## Non-Tuberculous Disease.

(See Table III.)

During the year 12 patients who had been treated for diseases other than tuberculosis were dismissed.



Two of these were cases of haemolytic streptococcal infections, one a glandular abscess and one a case of arthritis of the hip. They received sulphanilamide in addition to surgical drainage.

There were four cases of osteomyelitis, sub-acute or chronic in nature. They were treated on the Winnett Orr principles of drainage, saucerisation, removal of sequestra, and plaster where necessary.

The other cases require little comment, save that the sarcoma of the lower jaw sent in as a cold abscess was inoperable.

### **Non-Pulmonary Tuberculosis.**

The remaining 97 patients suffered from some form of non-pulmonary tuberculosis.

#### **SPINAL DISEASE (11 CASES).**

(See Table IV.)

The 11 cases of tuberculosis of the spine ranged from lesions of the high dorsal region to lesions of the last lumbar. Ten of them were dismissed well, wearing celluloid spinal jackets. Three of these had had spastic paralysis of the lower limbs, but were able to walk normally on discharge with their spasticity completely recovered. The remaining patient was transferred to the County Fever Hospital with diphtheria and re-admitted later.

#### **HIP JOINT (9 CASES).**

(See Table V.)

Nine patients with hip joint disease were discharged, six of them with quiescent lesions, while three patients were improved. Operation was necessary in five instances.

#### **KNEE JOINT (4 CASES).**

(See Table VI.)

Four knee joint cases were discharged well wearing walking caliper splints. In two of these operative measures were necessary.

#### **OTHER BONES (4 CASES).**

(See Table VII.)

In this Table are grouped patients with miscellaneous bony lesions. Four of them were discharged during the year. They all required operative treatment, and with one exception were discharged with healed quiescent lesions. The latter case who was suffering from tuberculosis of the rib with sinus formation was transferred elsewhere after operation had been performed.

## MULTIPLE TUBERCULOSIS (11 CASES).

(See Table VIII.)

As usual, it was among this group that most of the deaths occurred. Four patients with widespread tuberculous infection died. One of these had in addition Addison's disease, but failed to make any response to supra-renal cortical extract. One patient with multiple lesions was discharged with all the lesions quiescent after operative treatment. Three were somewhat improved. The remaining three patients went home without showing any improvement.

## GLANDULAR TUBERCULOSIS.

During 1937, forty-nine patients classified as suffering from glandular tuberculosis were discharged. I have made frequent reference to my views on the treatment of glandular tubercle in the past, and I do not think it would serve any purpose to enlarge on them again at this time. Suffice it is to say that I still believe that operation is necessary in many cases, both for the value of the cosmetic result achieved, and on account of the shortening of the period of invalidism. In addition to operative treatment, of course, our cases all receive a period of sanatorium treatment, combined with general remedial measures such as ultra-violet light radiation. I often feel that the period of sanatorium treatment accorded these gland cases could with advantage be lengthened, but in the meantime pressure of beds makes this impossible.

The regions involved and the type of treatment employed on the gland cases discharged during the year may be summarised as follows :—

Region.	Treatment.	No. of Cases.
Cervical.	Excision.	20
Cervical.	Incision and Scraping.	22
Cervical.	Tonsillectomy only.	3
Preauricular.	Incision and Scraping.	1
Axillary.	Incision and Scraping.	1
Generalised.	General and Aspiration.	2
Total, ... ..		<hr/> 49 <hr/>

The remaining nine cases can only be classified in a miscellaneous group.

One suffered from tuberculous epididymitis and was discharged after operation. Another, a male patient aged 25 years, was found on investigation to be suffering from unilateral renal tuberculosis, and so

had nephrectomy performed. Thereafter he was transferred to Hairmyres. Two other urological cases were investigated. One of these suffered from a non-tuberculous pyonephrosis and was transferred to the Royal Infirmary, Glasgow. The other had bilateral renal tuberculosis, and was, therefore, inoperable.

Three patients suffering from various tuberculous lesions were sent from other sanatoria for tonsillectomy, and two for aspiration for deflected septum.

### General Remarks.

Our usual method of treatment has been carried out during the year, *i.e.*, a combination of adequate orthopaedic and general measures, including rest, fresh air, good diet, and ultra-violet light therapy, natural or artificial. When surgical intervention is necessary it is undertaken.

Most of the spine cases are dismissed wearing celluloid jackets, and the hip cases wearing celluloid spica splints. Celluloid appliances are also used for elbow and ankle cases. In knee-joint cases we are still making use of the walking-caliper splint in the quiescent phase in preference to celluloid or certalmid apparatus. The entire process in the manufacture of celluloid appliances from the initial plaster cast to the finished product is carried out in the hospital.

### Surgical Appliances.

*Celluloid Appliances.*—During the year, 36 new celluloid appliances were made and 19 repairs carried out. The types of the new appliances were as follows :—

Spinal Jackets,	...	...	...	...	...	17
Hip Spica Splints,	...	...	...	...	...	8
Knee Splints, ...	...	...	...	...	...	6
Ankle Splints, ...	...	...	...	...	...	1
Elbow Splints,	...	...	...	...	...	1
Foot Splints, ...	...	...	...	...	...	3

Nine of the new appliances, 2 spinal jackets, 3 hip splints, 1 ankle splint, 1 elbow splint, and 2 foot splints, were made for Hairmyres; and 4 repairs were carried out.

*Other Surgical Appliances.*—28 new surgical appliances, other than celluloid, were supplied, and 9 repairs sanctioned. The new appliances were as follows :—

Walking Caliper Splints,	...	...	...	...	6
Surgical Boots,	...	...	...	...	11
Artificial Limbs,	...	...	...	...	11

### Infectious Diseases.

Endeavours are still being made to immunise the staff and patients against diphtheria.

During the year a patient was admitted incubating whooping cough. Twelve other children who were immediate contacts and who had not had whooping cough were immunised. The vaccine was used as a prophylactic agent. Only one of these children developed a very modified attack.

In last year's report reference was made to the difficulty experienced in immunising patients against the streptococcal infections and to the fact that we had in recent times been treating these with the sulphonamides and that an account of this would be given when the series was completed. The following is an abstract of an article published in the "Lancet" on 6th November last :—

#### CHEMOTHERAPY OF STREPTOCOCCAL INFECTIONS, PARTICULARLY STREPTOCOCCAL TONSILLITIS.

My initial experience of the value of prontosil soluble and prontosil album was in two cases of acute septic arthritis of the hip joint, who each gave a history of sore throat followed later by a severe illness with high temperature, sweating, and hip joint pain. They were both gravely ill, and from the hip joints of both, pus containing the haemolytic streptococcus was aspirated, and thereafter the joints were drained surgically. The first patient received daily for three days 20 c.c. of 2½ per cent. solution of prontosil soluble, the sulphanilamide for oral administration not then being available. The second patient in addition to this received 1·8 gm. prontosil album by mouth daily. They both made good recoveries with complete restoration of joint function. I feel sure that their recovery would have been hastened had I known that a much larger dose could have been safely administered. I was, therefore, determined that, should the opportunity arise, I would test the method in larger doses on streptococcal infections.

**STREPTOCOCCAL TONSILLITIS.**—During the past six months an epidemic occurred among patients and staff, resulting in 45 cases of streptococcal tonsillitis, 39 of whom were treated with sulphanilamide. Since these were resident in hospital all were under constant observation, and could have complete bacteriological and clinical supervision.

They varied in age from 1 year to 45 years. In 22 cases p-aminophenyl-sulphonamide (prontosil album) was used, and in four of these 22, prontosil soluble was given intramuscularly as well; while the remaining 17 cases were treated by p-benzylamino-benzenesulphonamide (proseptasine). In all instances frequent and repeated cultures were made, and out of the total of 39 patients, 31 were infected by the haemolytic streptococcus and 8 by the streptococcus viridans.

Clinically in nearly all cases the illness was an acute one with prostration and considerable pyrexia, usually over 101°F. (38·3°C.), and sometimes as high as 103°F. (39·4°C.) and 104°F. (40°C.). In the haemolytic infections the fauces were very red and injected, the tonsils covered with exudate or pus, and the lingual papillae prominent. The patients with viridans infections were on the whole less acutely ill.

**DOSAGE.**—The practice was to give doses of prontosil album varying from 0·6 gm. in a child under 1 year to 7·2 gm. in an adult. With proseptasine the dose was sometimes greater, and in a few instances 12·5 gm. of this were given in 24 hours. As soon as the acute stage had passed, however, and the temperature had become normal, usually at the end of 24 hours and seldom later than 36 hours, the dose was reduced by half. This was continued for two or three days and again reduced until for the last two days only about 1·2 gm. daily were administered in an adult. The average adult patient received, therefore, in all, about 16 to 18 gm. of prontosil album. This, of course, varied with the severity and course of the disease, and in a few instances considerably higher amounts were given. It was found convenient where the massive doses were given to administer two tablets every two hours while the patient was awake. As far as clinical experience went, there was no appreciable difference in therapeutic efficiency between prontosil album and proseptasine.

**RESULTS.—HAEMOLYTIC STREPTOCOCCAL CASES.**—In 31 patients receiving sulphonamide this organism was isolated.



The first five patients treated received inadequate doses and the response was disappointing, the acute stage of their illness lasting more than 48 hours. The other 26 were treated on the massive dose system, and in them the response was satisfactory, 19 having normal temperatures within 24 hours, and the rest within 36 hours. Pain in the throat and general discomfort soon disappeared and most of them declared themselves recovered.

It was noticed in some patients who had been seriously ill that the pulse rate did not return to normal as rapidly as the temperature, and that, although they had little complaint, they looked shaken and exhausted. Did this indicate that, though there had been rapid destruction of the organism from increase in the haemobactericidal power, considerable toxemia remained?

It was in consequence decided to try the combined administration of the drug and anti-streptococcal serum in the severest cases, and seven patients each received 6,000 units. It seemed that this might have been of advantage, and in the severe streptococcal septicaemic conditions should be considered worthy of trial.

It is significant that in no case were there any new complications.

**STREPTOCOCCUS VIRIDANS CASES.**—The eight patients from whom the *streptococcus viridans* was isolated suffered from an infection of a less overwhelming intensity; their temperature was less high, and prostration was much less severe. In spite of this, however, the sulphanilamide did not have the same dramatic efficacy. Although the same dosage was administered the patient took longer to recover, and the temperature was not completely normal again till the third or fourth day, tending to show a slight afternoon rise.

**CERVICAL ADENITIS AND CELLULITIS.**—Six children were admitted to hospital with cervical swellings and a history of sore throat 10 to 14 days previously. They all had glandular swellings and surrounding cellulitis. One, a child of six, who received 9 gm. prontosil album in four days, was ready for discharge at the end of a week, the whole infection having subsided without surgical intervention. In the other five cases pus had already formed and drainage was necessary, but they were well by the end of 10 days. These patients were all infected by the haemolytic streptococcus, which was isolated from their throats and also (in the five who required operation) from the discharge.



**RELAPSES.**—In five patients with haemolytic streptococcal tonsillitis relapses occurred at periods ranging from two to four weeks after complete recovery from the primary attack. The second attack was milder and readily responded again to the drug. It would seem well to remember that treatment should not be suspended too soon. The general systemic effects are soon controlled by the drug, but the local lesion is not influenced to the same extent.

**PROPHYLAXIS.**—One or other of the sulphonamides was given as a prophylactic to 30 patients in doses varying from 0.6 gm. to 3 gm. daily for a few days. This, of course, could not be continued indefinitely, and clinical cases continued to arise at intervals. The sulphonamides had no prophylactic value in checking the spread of tonsillitis under epidemic conditions.

**TOXICITY.**—Although, as far as therapeutic efficiency goes, it was not possible to differentiate between prontosil album and proseptasine clinically, the latter appeared to be less toxic.

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**BEDSIDE TUITION.**—The teacher has, as usual, carried out bedside tuition during the year. Children of school age are taught as much as possible of the usual school subjects. All patients, both adults and children, are taught arts and crafts.

### **X-ray Department.**

During the year, 259 radiological examinations were made, 111 of these being of indoor patients, and 148 of outdoor patients.

### **Dental Treatment.**

The visiting dentist paid four visits during the year, and 30 patients were treated as follows :—

Extractions,	...	...	...	...	...	...	52
Fillings,	...	...	...	...	...	...	18
Scaling,	...	...	...	...	...	...	4

## Indoor Operations.

### 1. OPERATIONS WITH GENERAL OR SPINAL ANAESTHESIA.

Disease.	No. of Cases.	Operation.	Remarks.
Tub. Cervical Adenitis.	25	Excision.	Well.
Tub. Cervical Adenitis.	31	Incision and drainage.	Well.
Tub. Cervical Adenitis.	3	Tonsillectomy.	Well.
Tub. of Sternum.	1	Removal of sequestra.	Well.
Tub. of Carpus.	1	Partial excision.	Well.
Tub. Dactylitis.	2	Removal of phalanx, etc.	Well.
Tub. of Hip.	2	Removal of sequestra, etc.	Well.
Tub. of Sacro-iliac Joint.	1	Sequestrotomy and drainage.	Improved.
Tub. of Knee.	1	Excision.	Well.
Renal Tuberculosis.	3	Cystoscopy and catheterisation of ureters.	For diagnosis.
Renal Tuberculosis.	1	Nephrectomy.	Well.
Acute Streptococcal Cervical Abscess.	1	Incision.	Well.
Empyema.	1	Excision and drainage.	Well.
Sinusitis.	1	Drainage.	Improved.
Hodgkin's Disease.	1	Glands excised.	For diagnosis.
Branchial Cyst.	1	Excision.	Well.
Osteomyelitis of Jaw.	1	Sequestrotomy.	Well.
Osteomyelitis of Radius.	1	Sequestrotomy.	Well.
Osteomyelitis of Hand.	2	Incision, etc.	Well.
Osteomyelitis of Tibia.	1	Sequestrotomy.	Well.
	—		
Total,	81		
	==		

### 2. MINOR OPERATIONS WITH LOCAL ANAESTHESIA.

Aspiration of psoas abscesses, paracentesis, etc.=494,

TABLE III.

## NON-TUBERCULOUS DISEASE.

No. of Case.	Sex.	Age in Years.	Disease.	Treatment.	Result.	Residence in Days.	Remarks.
1	M.	2 $\frac{1}{2}$	Acute streptococcal adenitis.	Sulphanilamide.	Well.	19	—
2	M.	10	Acute streptococcal arthritis of hip.	Drainage. Sulphanilamide.	Well.	91	—
3	F.	1	Acute osteomyelitis of jaw.	Drainage.	Well.	25	—
4	M.	16	Osteomyelitis of radius.	Removal of sequestra. Plaster.	Healed.	409	Patient had two operations.
5	M.	56	Osteomyelitis of radius.	Removal of sequestra. Plaster.	Healed.	25	—
6	M.	19	Osteomyelitis of tibia.	Removal of sequestra. Plaster.	Improved.	5	Readmitted to Hairmyres.

TABLE III—Continued.

No. of Cases.	Sex.	Age in Years.	Disease.	Treatment.	Result.	Residence in Days.	Remarks.
7	M.	25	Branchial cyst.	Excision.	Well.	3	—
8	M.	12	Hodgkin's Disease.	Excision of glands.	I S.Q.	3	For diagnosis. Readmitted to Hairmyres.
9	M.	30	Sinusitis.	Drainage.	Improved.	2	Readmitted to Hairmyres.
10	M.	12	Sarcoma of lower jaw.	General.	Died.	183	—
11	F.	2 <sup>6</sup> / <sub>15</sub>	Infantile paralysis.	Electrical treatment.	I.S.Q.	15	Transferred to Motherwell with scarlet fever.
12	F.	3	Infantile paralysis both legs.	Splintage. Electrical treatment.	Improved.	134	To attend O.P. Dept.

TABLE IV.

## SPINAL DISEASE (11 CASES).

No. of Case.	Condition on Admission. Region Affected, &c.	Sex.	Age.	Duration of Illness in Years.	Treatment.	Result.					Residence in Days.	Remarks.
						Healed.	Improved.	I.S.Q.	Worse.	Died.		
13	1st and 2nd cervical vertebrae with sinus.	M.	11	1	Operation. Recumbency. Plaster.	1	—	—	—	—	1,956	—
14	5th-7th dorsal vertebrae.	F.	12	1	Celluloid jacket.	1	—	—	—	—	489	—
15	6th-10th dorsal vertebrae with abscess and paresis.	M.	5	$\frac{6}{1}$	Aspiration. Celluloid jacket.	1	—	—	—	—	1,343	—
16	9th-11th dorsal vertebrae with abscesses.	M.	18	2	Recumbency. Aspiration. Celluloid jacket.	1	—	—	—	—	1,790	—
17	Extensive disease of almost all dorsal spine with paresis of lower limbs.	F.	12	8	Recumbency. Celluloid jacket.	1	—	—	—	—	953	Walks well.

TABLE IV.—Continued.

18	Dorso - lumbar region. Disease quiescent.	M.	7	4	Celluloid jacket.	1	—	—	—	2	Admitted for celluloid jacket.
19	3rd and 4th lumbar vertebrae. Disease quiescent.	M.	9	4	Celluloid jacket.	1	—	—	—	2	Admitted for celluloid jacket.
20	3rd and 4th lumbar vertebrae with abscess.	M.	32	1	Recumbency. Aspiration. Celluloid jacket.	1	—	—	—	1,020	—
21	3rd-5th lumbar vertebrae with psoas abscess.	F.	4	$\frac{4}{1\frac{1}{2}}$	Recumbency. Aspiration.	—	1	—	—	960	To Motherwell Hospital with diphtheria. Readmitted later.
22	3rd-5th lumbar vertebrae with psoas and lumbar abscesses. Paresis of lower limbs.	M.	22	2	Recumbency. Aspiration. Celluloid jacket.	1	—	—	—	1,474	Able to walk well.
23	4th and 5th lumbar vertebrae with psoas abscess.	M.	24	1	Recumbency. Aspiration. Celluloid jacket.	1	—	—	—	1,146	—



TABLE V.  
HIP JOINT (9 CASES).

No. of Case.	Condition on Admission. Region affected, &c.	Sex.	Age.	Duration of Illness in Years.	Treatment.	Result.					Residence in Days.	Remarks.
						Healed.	Improved.	L.S.Q.	Worse.	Died.		
24	Right hip. Disease of femur and acetabulum.	M.	4	1	Extension. Operation. Plaster. Celluloid splint.	1	—	—	—	—	1,831	Ankylosed.
25	Right hip. Disease of epiphysis of femur.	M.	5	$\frac{6}{12}$	Extension.	1	—	—	—	—	958	—
26	Right hip. Extensive disease of femur and acetabulum with abscess.	M.	8	1	Operation. Plaster. Celluloid splint.	1	—	—	—	—	1,677	Ankylosed.
27	Right hip. Quiescent disease of femur and acetabulum.	F.	10	5	Plaster. Celluloid splint.	1	—	—	—	—	51	Quiescent case. Ad- mitted with frac- tured femur.

TABLE V—Continued.

28	Left hip. Disease of great trochanter with sinus.	F.	10	2	Operation.	1	—	—	—	220	Transferred to Hairmyres.
29	Left hip. Extensive disease of femur and acetabulum with shortening.	F.	16	1½	Extension. Aspiration. Operation. Celluloid splint.	1	—	—	—	1,663	Ankylosed.
30	Left hip. Extensive disease of femur and ilium with sinuses.	F.	26	2½	Extension. Operation.	—	1	—	—	840	Home at own request.
31	Left hip. Extensive disease of femur and ilium with sinuses and abscess.	F.	26	3½	Removal of sequestra.	—	1	—	—	6	Admitted for operation.
32	Left hip. Destruction of femoral epiphysis.	F.	35	8	Extension.	—	1	—	—	42	—

TABLE VI.  
KNEE JOINT (4 CASES).

No. of Case.	Condition on Admission. Region Affected, &c.	Sex.	Age.	Duration of Illness in Years.	Treatment.	Result.					Residence in Days.	Remarks.
						Healed.	Improved.	I. S. Q.	Worse.	Died.		
33	Left knee. Disease of epiphyses of femur and tibia.	M.	4	$\frac{6}{1\frac{1}{2}}$	Extension. Plaster. Walking caliper.	1	—	—	—	—	793	—
34	Left knee. Extensive disease of femoral and tibial epiphyses.	F.	4	1	Operation. Splint. Walking caliper.	1	—	—	—	—	1,126	—
35	Right knee. Disease of femoral epiphysis.	M.	11	4	Walking caliper.	1	—	—	—	—	38	—
36	Right knee. Disease of lower end of femur.	F.	14	$\frac{3}{1\frac{1}{2}}$	Operation. Plaster. Walking caliper.	1	—	—	—	—	338	—

TABLE VII.  
OTHER BONES (4 CASES).

No. of Case.	Condition on Admission. Region Affected, &c.	Sex.	Age.	Duration of Illness in Years.	Treatment.	Result.					Residence in Days.	Remarks.
						Healed.	Improved.	I. S. Q.	Worse.	Died.		
37	Dactylitis of 5th metacarpal with sequestra.	F.	2	$\frac{3}{12}$	Operation. Splintage.	1	—	—	—	—	263	—
38	Disease of right malar bone.	M.	7	2	Operation.	1	—	—	—	—	207	—
39	Disease of sternum with sinus.	M.	31	4	Operation.	1	—	—	—	—	461	—
40	Tuberculosis of rib with sinus.	M.	40	6	Operation.	—	1	—	—	—	3	Admitted for opera- tion.

TABLE VIII.

## MULTIPLE TUBERCULOSIS (11 CASES).

No. of Case.	Condition on Admission. Region affected, &c.	Sex.	Age.	Duration of Illness in Years.	Treatment.	Result.					Residence in Days.	Remarks.
						Healed.	Improved.	I.S.Q.	Worse.	Died.		
41	Tuberculosis of hip and pelvis. Amyloid disease.	F.	17	1	Operation, etc.	—	—	—	—	—	14,973	—
42	Tuberculosis of sacro-iliac joint with sinuses. Abdominal tuberculosis.	F.	21	$1\frac{7}{8}$	General.	—	—	—	1	—	425	Advanced dying case.
43	Disease of 3rd and 4th lumbar vertebrae with abscesses. Tuberculosis of right hip.	F.	22	$1\frac{1}{2}$	Extension. Aspiration. Splint.	—	1	—	—	—	1,016	Home at own request.
44	Multiple osseous tuberculosis with abscess.	M.	25	10	Operation.	1	—	—	—	—	33	All lesions quiescent on admission unless one with small abscess.

TABLE VIII—Continued.

		M.	37	25	Operation.	—	1	—	—	—	28	Sinuses healed.
45	Tuberculosis of pelvis and both hips with abscess.	M.	37	25	Operation.	—	1	—	—	—	28	Sinuses healed.
46	Tuberculosis of spine with abscess. Pulmonary tuberculosis. Addison's Disease.	M.	42	2	Recumbency. Aspiration. Supra-renal cortical extract.	—	—	—	—	1	790	—
47	Tuberculosis of left hip with abscess. Tuberculosis of right ankle	F.	43	14	Removal of sequestra.	—	1	—	—	—	61	—
48	Tuberculosis of spine. Pulmonary tuberculosis. Bilateral renal tuberculosis.	F.	56	3	General.	—	—	—	—	1	860	—
49	Multiple tuberculous adenitis. Pulmonary tuberculosis.	M.	57	1	General.	—	—	—	—	1	213	—
50	Tuberculosis of glands, sternum, and abdomen.	M.	60	4	Excision of glands.	—	—	1	—	—	3	—
51	Bilateral renal tuberculosis. Tuberculosis of spine.	M.	60	$\frac{6}{12}$	General.	—	—	1	—	—	125	—



### Outdoor Department.

During the year, 2,282 attendances were paid at the Outpatient Department, and in 339 instances the patients were seen for the first time. Details of the 339 new cases are contained in the following Tables. As in former years, all the cases were sent on the recommendation of the Welfare Centres, Tuberculosis Dispensaries, Educational Clinics, etc.

#### Consultations.

##### A. TUBERCULOUS DISEASE.

Pulmonary, ... ..	1
Genito-Urinary, Renal Tuberculosis, 2 ; Tub. Epididymitis, 1, ...	3
Glandular, ... ..	43
Bones and Joints:—Shoulder, 2 ; Elbow, 1 ; Wrist, 1 ; Spine, 16 ; Hip, 9 ; Knee, 5 ; Ankle, 1 ; Others, 9, ...	44
Multiple, ... ..	3
Total, ... ..	<hr/> 94 <hr/>

##### B. NON-TUBERCULOUS DISEASE.

<i>Pulmonary System—</i>	
Pul. Fibrosis, ... ..	1
<i>Nervous System—</i>	
Infantile Paralysis, 3 ; Ulnar Paralysis, 1 ; Schizophrenia, 1 ; Sciatica, 1, ... ..	6
<i>Bones and Joints—</i>	
Normal, 14 ; Fractures, 4 ; Sprain, 2 ; Synovitis, 1 ; Periostitis, 6 ; Osteomyelitis, 7 ; Sarcoma, 1 ; Spondylitis Deformans, 2 ; Osteoarthritis, 7 ; Rheumatoid Arthritis, 1 ; Traumatic Arthritis, 3 ; Septic Arthritis, 3 ; Double Congenital Dislocation of Hip, 1 ; Gummata, 1 ; Rickets, 3 ; Scoliosis and Kyphosis, 2 ; Perthes Disease, 1 ; Talipes Equinus, 1 ; Pes Planus, 1 ; Pes Cavus, 1, ... ..	62
<i>Septic Diseases—</i>	
Acute Cervical Adenitis, 1 ; Acute Abscess of Jaw, 1 ; Acute Abscess of Neck, 1 ; Cellulitis of Neck, 1 ; Whitlow, 1 ; ... ..	5
Carry forward, ... ..	<hr/> 74

<i>Miscellaneous—</i>	<i>Brought forward, ...</i>	<i>74</i>
Branchial Cyst, 1 ; Nasal Polypi, 1 ; Chronic Parotitis, 1 ; Haematoma, 1 ; Phlebitis, 2 ; Fibrositis, 3 ; Amputa- tions (Artificial Limbs), 6, ... ..	15	
Total, ... ..	89	

### X-ray Examinations.

#### A. TUBERCULOUS DISEASE.

Pulmonary, 4 ; Contacts, 1, ... ..	5
Genito-Urinary :—Renal Tuberculosis, 2, ... ..	2
Glandular, ... ..	5
Bones and Joints :—Shoulder, 2 ; Elbow, 1 ; Wrist, 1 ; Spine, 8 ; Hip, 5 ; Knee, 4 ; Ankle, 1 ; Others, 9, ...	31
Multiple, ... ..	2
Total, ... ..	45

#### B. NON-TUBERCULOUS DISEASE.

##### *Pulmonary System—*

Pleurisy, 1, ... ..	1
---------------------	---

##### *Nervous System—*

Ulnar Paralysis, 1 ; Schizophrenia, 1 ; Sciatica, 1, ...	3
--	---

##### *Bones and Joints—*

Normal, 11 ; Fractures, 4 ; Sprain, 2 ; Synovitis, 1 ; Periostitis, 6 ; Osteomyelitis, 6 ; Spondylitis De- formans, 2 ; Osteoarthritis, 7 ; Rheumatoid Arth- ritis, 1 ; Traumatic Arthritis, 3 ; Septic Arthritis, 3 ; Gummata, 1 ; Rickets, 1 ; Scoliosis and Kyphosis, 2 ; Double Congenital Dislocation of Hip, 1 ; Perthes Disease, 1 ; Talipes Equinus, 1 ; Pes Cavus, 1, ...	54
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##### *Septic Diseases—*

Acute Abscess of Jaw, 1 ; Whitlow, 1, ... ..	2
--	---

##### *Miscellaneous—*

Haematoma, 1 ; Lipoma, 1 ; Phlebitis, 2, ... ..	4
---	---

Total, ... ..	64
---------------	----

### Operations.

Disease.	Cases.	Operation.	Remarks.
Tuberculous Cervical Adenitis.	2	Incision and Scraping.	Well.
Tuberculosis of Sternum.	1	Removal of Sequestrum.	Well.

ULTRA-VIOLET LIGHT THERAPY.—18 patients attended for the first time for ultra-violet light therapy, 1,146 revisits were paid, and 2,260 exposures given. Many of these patients required dressings, and, in all, 291 were done during the year.

MISCELLANEOUS AND DRESSINGS.—The remaining 26 cases attended for dressings, plasters, injections, etc.

REVISITS.—In addition to the new cases, revisits were paid during the year for the undernoted purposes :—

Operations, ... ..	Nil.	Miscellaneous, ... ..	33
X-Ray Examinations, ...	39	Electrical Treatment,	245
Consultations, ... ..	337	Dressings, ... ..	143

### Hours of Consultations and Treatment.

CONSULTATIONS.—Monday and Thursday, from 2 p.m.

X-RAY EXAMINATIONS.—Monday and Thursday, from 2 p.m.

ULTRA-VIOLET LIGHT TREATMENT :—

Females—Monday and Thursday, from 1.15 p.m.

Males—Tuesday, from 3 p.m., and Saturday, from 10 a.m.

ELECTRICAL TREATMENT.—By arrangement at time of consultation.

OUTDOOR OPERATIONS—DRESSINGS AND PLASTERS.—By arrangement.

The Outdoor Department exists in the first place to act as a centre for consultation in the diagnosis of orthopaedic conditions, and secondly as an after-care centre for the observation of orthopaedic patients wearing appliances. All cases for consultation are therefore now referred from the district Tuberculosis and Child Welfare Centres, and occasionally from the Educational Medical Service and Public Assistance Authorities. The Public Assistance cases are mainly for consultation and advice regarding artificial limbs and surgical appliances.

# COUNTY SANATORIUM, UPPERTOWN, LONGRIGGEND.

*Physician Superintendent*—LESLIE J. LANG, M.B., Ch.B., D.P.H.

*Visiting Physician*—RICHARD RAE, M.B., Ch.B., D.P.H.

*Matron*—Miss CAMPBELL.

## ADMISSIONS AND DISCHARGES.

In Residence 1st January.	Admitted during year.	Discharged during year.	Died during year.	In Residence 31st December.
47	82	*86	10	33
		96		

\* One patient was re-admitted and completed two periods of residence during the year, making a net total of 85 discharged and 10 died, and the subsequent statistics deal with the total of 95.

PLACE OF RESIDENCE.—All cases discharged resided in the County of Lanark, the place of residence according to parish being as follows :—

Avondale, ...	1	Lanark, ...	1
Blantyre, ...	7	Lanark Burgh, ...	1
Bothwell, ...	33	Old Monkland, ...	10
Cambuslang, ...	4	Shotts, ...	3
Cambusnethan, ...	3	Cadder, ...	6
Dalserf, ...	6	Rutherglen, ...	5
Douglas, ...	1	Carmunnock, ...	1
New Monkland, ...	6	Hamilton, ...	3
Carluke, ...	2	Stonehouse, ...	2
			95

AGE AND SEX.—In the following table the cases are shown classified according to age and sex, and according to age-groups for both

sexes, each age-group also containing the pulmonary, non-pulmonary, tuberculised, and non-tuberculous cases referable to it:—

Quinquennial	Both			Age-Groups.	Pulm.	Non-			Non-Tuber- culous.
Periods.	Males.	Females.	Sexes.			Pulm.	Suspect.	culous.	
— 5	12	8	20	Pre-School, ...	—	9	4	7	
—10	2	11	13	School Age, ...	{	1	2	6	5
—15	—	5	5			—	2	1	2
—20	1	12	13	Adolescent, ...	{	9	2	—	1
—25	1	5	6			5	1	—	—
—30	1	12	13	Early Maturity, ...	{	11	1	—	1
—35	3	6	9			6	—	—	3
—40	—	3	3			2	1	—	—
—45	—	5	5	Late Maturity, ...	{	5	—	—	—
—50	—	2	2			1	1	—	—
—55	—	1	1			1	—	—	—
—60	1	2	3			1	1	—	1
—65	—	1	1			1	—	—	—
—70	—	1	1			—	1	—	—
	21	74	95			43	21	11	20
86						86			

#### DURATION OF RESIDENCE.

Residence in Days.  
Maximum. Minimum. Average.

Pulmonary, ...	...	1,055	4	232
Non-Pulmonary, ...	...	439	13	190
Suspect, ...	...	358	4	143
Non-Tuberculous, ...	...	446	22	125

Residence in Months.

	0-1	1-3	-6	-9	-12	-18	-24	Over.
Pulmonary, ...	8	5	13	3	5	5	1	3
Non-Pulmonary, ...	1	1	11	4	2	2	—	—
Suspect, ...	2	3	3	2	1	—	—	—
Non-Tuberculous, ...	1	9	8	—	1	1	—	—

TRANSFERS TO OTHER INSTITUTIONS.—After observation or at the end of their period of sanatorium treatment, 11 cases were transferred to other institutions, as follows:—

Motherwell, ...	2 (Scarlet Fever 2).
Hairmyres, ...	4
Stonehouse, ...	1
Shotts, ...	3
Calderbank, ...	1

## Pulmonary Tuberculosis.

(38 Cases).

Included under this heading are two cases of tuberculous pleurisy, females of 29 and 48 years. Both had a history of pleurisy with effusion before admission. The first was discharged, the disease being quiescent, and parenchyma not affected, after 134 days. The second went home improved after 94 days. She had a discharging sinus and the sterum sputa were all negative, and there were no clinical signs of parenchymatous involvement. A third case of tuberculous cervical adenitis, a female of 19, had X-ray appearance suspicious of early pulmonary lesion. She was transferred to Motherwell Hospital with scarlet fever 6 days after admission, without the diagnosis of pulmonary tuberculosis being established.

The remaining 40 cases are of parenchymatous tuberculosis.

**DURATION OF ILLNESS.**—The duration of illness recorded at the time of admission, and stated in monthly periods, was as follows:—

Classification on

Admission.	1-3	3-6	6-12	12-18	18-24	Over 24	Total.
Group I, ...	2	—	—	—	—	1	3
Group II,	1	3	2	—	—	6	12
Group III,	—	6	6	3	1	9	25

**DURATION OF ILLNESS OF FATAL CASES.**—7 cases of pulmonary tuberculosis died, and the duration of illness from the date of onset to that of death was thus recorded in monthly periods:—

1-3	3-6	6-9	9-12	12-18	18-24	Over 24
—	1	1	1	—	1	3

**GENERAL RESULTS OF TREATMENT.**—The general condition of the patients on discharge is shown in the following tabular statement:—

Classification on

Admission.	Quiescent.	Improved.	Stat.	Worse.	Died.
Group I, ...	1	2	—	—	—
Group II, ...	3	7	1	—	1
Group III, ...	—	8	7	4	6

**SPUTUM EXAMINATIONS.**—Bacteriological examinations showed that 82.5 per cent. of the verified cases had tubercle bacilli in the spit:—

Classification on

Admission.	Positive.	Negative.
Group I, ...	2	1
Group II,	8	4
Group III,	23	2



SPUTUM NEGATIVE PULMONARY TUBERCULOSIS (7 cases).—In the spit negative cases the X-ray was positive in all instances. The following confirmatory signs were found :—

Crepitations and Haemoptysis,	...	...	...	...	2
Crepitations only,	...	...	...	...	2
Sputum positive prior to admission,	...	...	...	...	2

One case, a woman of 28, with a definitely positive X-ray, had no confirmatory signs apart from history of simple pleurisy.

### **Non-Pulmonary Tuberculosis.**

(21 Cases).

Cases of non-pulmonary tuberculosis requiring only hygienic and nursing treatment were dealt with in the Institution, and those for whom operative treatment or special appliances were necessary were transferred to Hairmyres, Stonehouse Hospital or Motherwell Hospital.

ABDOMINAL TUBERCULOSIS (7 Cases).—One case had, in addition, tuberculous cervical adenitis and one tuberculous salpingitis. Of the 7 cases discharge during the year, in 4 the condition was quiescent at time of discharge, 2 were improved, and 1 died, the condition in this case being complicated by faecal fistulae. One case was transferred to Shotts for further treatment, when the children's ward was closed.

GLANDS (9 Cases).—In 8 cases the cervical glands were affected. Five cases were discharged quiescent and 2 much improved. The remaining case, a child of 2 years, developed pneumonia and died.

One case was of cervical and mediastinal adenitis and corneal ulceration, and was quiescent on discharge. One case was of corneal ulceration and mediastinal adenitis. Quiescent on discharge.

### **Bone and Joints.**

(2 Cases).

One case of tuberculosis of the hip was treated for 35 days while waiting admission to Stonehouse Hospital. The other, a case of old-standing tuberculosis of ankle with sinus formation, in a woman of 65 years, went home against advice after 13 days with the lesion unchanged.

### Renal Tuberculosis.

(2 Cases).

Both were inoperable cases and were discharged, improved, after 188 and 156 day's treatment respectively.

### Suspected Tuberculosis.

(11 Cases).

All were children, 8 being contacts with spit positive cases. All showed radiological abnormalities and had positive skin tests. All were improved on discharge.

### Non-Tuberculous Diseases.

(20 Cases).

In 17 cases—that is 20·8 per cent. of those under review—the diagnosis of tuberculosis was altered, as follows:—

ADULTS (8).—*Notified pulmonary tuberculosis* (5).—Pulmonary fibrosis, 3; septic broncho-pneumonia and otitis media, 1; asthma and bronchitis, 1; debility, 1.

*Notified renal tuberculosis* (2).—Both chronic pyo-nephritis and cystitis—not tuberculosis.

CHILDREN (12).—*Notified pulmonary tuberculosis* (3).—Bronchitis and debility, 1; debility following pneumonia, 2.

*Notified abdominal tuberculosis* (8).—Debility, 2; coeliac disease, 1.

*Notified tuberculosis of cervical glands* (1).—Septic cervical adenitis with abscess, 1.

### Special Examinations and Treatment.

ARTIFICIAL PNEUMOTHORAX.—This form of treatment was carried out by transferring patients to Motherwell Hospital for the initial operation and for re-fills.

During the year 11 patients received this treatment.

6 of the patients were discharged. In two cases no collapse was obtained on account of adhesion. The remaining four cases had had treatment for 2 years, 10 months, 9 months and 3 months respectively and treatment was continued at home.

### Treatment with Gold Salts.

Treatment with intravenous crisalbine or intra muscularly myocrisin was given in 7 cases during the year.

4 cases showed improvement ; 1 showed no improvement ; in 2 cases treatment was stopped because of toxic symptoms.

X-RAY EXAMINATIONS.—59 patients were X-rayed at the County Hospital, Motherwell, the radiographs being sent to the Sanatorium and read in conjunction with the clinical picture.

OPHTHALMIC SPECIALIST.—Saw one case in consultation during the year.

DENTAL TREATMENT.—The visiting dentist made 7 visits and treated 27 patients, the total number of extractions being 88. Two fillings were carried out, and 1 set of denture supplied to a necessitous case.

### Administration.

BUILDINGS AND GROUNDS.—During the year the heating system was overhauled and new radiator installed. Reflooring of all the wards was carried out. A platform to accommodate 8 beds, with a door communicating with the ward, was erected outside the non-pulmonary ward.

ACCOMMODATION.—During the year the children and adult male accommodation was given over to adult females. The accommodation now consists of 30 beds for adult females (open cases), and 21 beds for adult and juvenile females (closed cases).

STAFF.—The *Medical Staff* of 2 is non-resident. The *Nursing Staff* comprises the Matron, 2 general trained sisters, 4 staff nurses and 4 probationers. *Domestic Staff*.—1 cook, 2 laundry maids, and 8 maids. *Outdoor Staff*.—1 engineer attendant (resident) and 2 assistant gardener-firemen (1 resident).

## COUNTY SANATORIUM, SHOTTS.

*Physician-Superintendent*—CATHERINE B. WILSON, M.B., Ch.B., D.P.H.

*Visiting Physician*—JOHN M'MILLAN, M.B., Ch.B.

*Matron*—Miss SIMONS.

### ADMISSIONS AND DISCHARGES.

In Residence 1st January.	Admitted during year.	Discharged during year.	Died during year.	In Residence 31st December.
40	92	68	14	50
		<div style="display: flex; align-items: center; justify-content: center;"> <span style="font-size: 1.5em;">}</span> </div>		
		82		

### PLACE OF RESIDENCE.

All the cases discharged during the year resided within the County of Lanark, and the parish of residence is shown in the following table :—

Avondale, ... ..	3	Dalserf, ... ..	2
Blantyre, ... ..	6	Glasgow, ... ..	3
Bothwell, ... ..	16	Hamilton, ... ..	1
Cadder, ... ..	4	Lanark, ... ..	2
Cambuslang, ... ..	7	Lesmahagow, ... ..	1
Cambusnethan, ... ..	7	New Monkland, ... ..	5
Carluke, ... ..	1	Old Monkland, ... ..	1
Carmichael, ... ..	1	Rutherglen, ... ..	4
Carnwath, ... ..	1	Shotts, ... ..	16
Carmunnock, ... ..	1		

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## AGE AND SEX.

The following table shows the patients discharged, classified according to age group, sex, and type of disease :—

Quinquennial Periods.	Males.	Females.	Both Sexes.	Age Groups.	Pulmonary.	Non-Pulmonary.	Suspected Tuberculosis.	Non- Tuberculous.
— 5	5	3	8	Pre-School, ...	1	2	1	4
— 10	6	2	8	School Age, ...	—	—	1	7
— 15	10	1	11		—	4	1	6
— 20	8	4	12	Adolescent, ...	7	1	1	3
— 25	9	8	17		16	1	—	—
— 30	5	2	7		5	—	—	2
— 35	2	3	5	Early Maturity,	3	1	—	1
— 40	1	—	1		1	—	—	—
— 45	4	—	4		3	—	—	1
— 50	4	—	4		1	—	—	3
— 55	3	—	3		3	—	—	—
— 60	—	—	—	Late Maturity,	—	—	—	—
— 65	1	—	1		—	—	—	1
— 70	—	—	—		1	—	—	—
— 75	1	—	1		—	—	—	—
	59	23	82		41	9	4	28

## DURATION OF RESIDENCE.

				RESIDENCE IN DAYS.						
				Maximum.	Minimum.		Average.			
Pulmonary,	...	...		1,430	1		288			
Non-Pulmonary,	...	...		227	1		89			
Suspected Tuberculosis,				165	24		85			
Non-Tuberculous,	...	...		337	5		108			

				Residence in Months.						
				0-1	1-3	-6	-9	-12	-18	-24 Over.
Pulmonary,	...	...	11	6	7	2	5	3	1	6
Non-Pulmonary,	...	...	3	1	4	1	—	—	—	—
Suspected Tuberculosis,			1	—	3	—	—	—	—	—
Non-Tuberculous,	...	...	4	10	11	3	—	—	—	—

## TRANSFERS TO OTHER INSTITUTIONS.

Hairmyres Colony, ... ..	8	
County Orthopaedic Hospital, Stonehouse—		
For Tonsillectomy, ... ..	1	
Disease of Hip Joint, ... ..	1	
Osteomyelitis, ... ..	1	
	—	3
County Hospital, Bellshill—		
For Confinement, ... ..	1	
	—	1

**Pulmonary Tuberculosis.**

(41 Cases).

Included under this heading are the following cases of *tuberculous pleurisy* :—

M.22.—Admitted after 13 weeks in Motherwell, where frequent aspiration of pleural effusion had been performed. No symptoms of parenchymatous lesion. Discharged after 122 days at his own request. General condition good, X-ray negative.

M.50.—Admitted as convalescent pleural effusion, after aspiration. Discharged after 337 days. General condition good. No symptoms of pulmonary tuberculosis.

M.17.—Admitted as abdominal tuberculosis after abdominal operation in the Edinburgh Royal Infirmary, and repeated aspiration of pleural effusion. Discharged after 261 days. General condition very good. X-ray negative ; no signs of active tuberculosis.

Included under this heading are also the following 2 cases of *miliary tuberculosis* :—

F.23.—Onset 3 months before admission with lassitude, followed by rapid emaciation. Very ill on admission, highly fevered, doughy abdomen, faint scattered crepitations and slight nuchal rigidity. Died after 4 days. Post-mortem examination showed caseating mediastinal glands, miliary deposits in lungs, spleen, liver and diaphragm ; deposits also on brain surface.



M.2.—Onset 2 months before admission with swelling of abdomen. Very ill on admission; high fever, emaciation signs of patchy broncho pneumonia. Died after 31 days. Post mortem examination showed caseating mesentive glands, ulceration of intestine and miliary deposits all over both lungs.

Included under this heading are also 2 cases in which the diagnosis was *not established*. Both patients went home without permission in 3 days and 4 hours respectively. Both were admitted as cases of pulmonary tuberculosis; one had a history of dry pleurisy and staining, and signs of fibrosis, the other was not examined while in hospital.

These cases having been deducted, there remain 34 cases of *parenchymatous tuberculosis*.

DURATION OF ILLNESS.—The duration of illness recorded at the time of admission, and stated in monthly periods, was as follows:—

Classification on Admission.	1-3	3-6	6-12	12-18	18-24	Over 24	Total.
Group I, ...	4	—	2	2	—	2	10
Group II, ...	2	4	—	1	2	5	14
Group III, ...	2	2	1	1	—	4	10

DURATION OF ILLNESS OF FATAL CASES.—9 cases of pulmonary tuberculosis died, and the duration of illness from the date of onset to that of death was thus recorded in monthly periods:—

1-3	3-6	6-9	9-12	12-18	18-24	Over 24
1	2	1	1	1	—	3

GENERAL RESULTS OF TREATMENT.—The general condition of the patients on discharge is shown in the following tabular statement:—

Classification on Admission.	Quiescent.	Improved.	Stat.	Worse.	Died.
Group I, ...	4	3	2	1	—
Group II, ...	2	10	1	1	1
Group III, ...	—	—	—	1	8

SPUTUM EXAMINATIONS.—Bacteriological examinations showed that 76.4 per cent. of the verified cases had tubercle bacilli in the spit:—

Classification on Admission.	Positive.	Negative.	No Spit.
Group I, ...	6	4	—
Group II, ...	12	1	2
Group III, ...	8	—	1

SPUTUM NEGATIVE PULMONARY TUBERCULOSIS (8 Cases).—In 6 of these cases the X-ray was positive, and the diagnosis was further supported by the following confirmatory signs :—

Crepitations, haemoptysis, ... ..	1
Crepitations, haemoptysis, pleurisy, ... ..	1
Crepitations, haemoptysis, positive spit prior to admission, ... ..	1
Haemoptysis, pleurisy, ... ..	1

One case of chronic fibrotic tuberculosis had no confirmatory symptoms. X-ray was definitely positive, showing lesions of old standing.

The two cases in which X-ray examination was not carried out while in hospital had a history of positive spit prior to admission.

### Non-Pulmonary Tuberculosis.

(9 Cases).

#### ABDOMINAL TUBERCULOSIS.

(6 Cases).

*Febrile*.—M.11.—Admitted from Motherwell where he had been sent as a case of typhoid ; resistance, pain, tenderness, definite masses on admission ; disease quiescent and general condition good on discharge after 227 days.

F.1  $\frac{10}{12}$ .—Distension, resistance, diarrhoea, emaciation. Very ill on admission and died after 5 days.

*Afebrile*.—M.14.—Admitted after laparotomy in Glasgow Royal Infirmary ; tenderness and palpable mesenteric glands ; no abnormality on discharge after 117 days.

M.3.—Distension, large gland mass in left umbilical region ; taken home against advice after 131 days ; condition much improved.

M.33.—Operation diagnosis in Glasgow Royal Infirmary seven months before admission ; resistance, tenderness, pain ; went home against advice after 17 days ; condition unchanged.

M.21.—Laparotomy in Glasgow Royal Infirmary fourteen months before admission, operation diagnosis; absconded from hospital on the day of admission; not examined.

#### BONES AND JOINTS.

(1 Case).

F.14.—Admitted from Glasgow Royal Infirmary; tuberculous disease of left hip joint; transferred Stonehouse after 80 days; general condition improved.

#### GLANDS.

(2 Cases).

M.10.—Cervical adenitis with discharging sinus on admission; marked reaction to tuberculin tests; healed scar on discharge after 112 days.

M.16.—Admitted from Motherwell after incision of cervical abscess (pus contained tubercle bacilli); old empyema scar, slight pulmonary fibrosis. Discharged after 103 days; condition quiescent.

#### Non-Tuberculous Diseases.

(28 Cases).

In 28 cases—that is, 34·1 per cent. of those under review—the diagnosis of tuberculosis was altered, as follows:—

ADULTS (11).—*Notified Pulmonary Tuberculosis* (10).—Pulmonary fibrosis, 6; pulmonary fibrosis, visceroptosis, 1; pulmonary fibrosis, colitis, myocarditis, 1; bronchitis, debility, 1; carcinoma of lung, 1.

*Notified Abdominal Tuberculosis* (1).—Colitis, rectal fistula, 1.

CHILDREN (17).—*Notified Pulmonary Tuberculosis* (2).—Pulmonary fibrosis, asthma, 1; bronchitis, otorrhoea, 1.

*Notified Suspected Abdominal Tuberculosis* (6).—Debility, enteritis, 3; debility, 1; cardiac disease, 1; marasmus, 1.

*Notified Tuberculous Osteitis* (1).—Chronic osteomyelitis, 1.

*Notified Suspected Tuberculosis* (8).—Bronchitis, debility, 2; bronchitis, rickets, debility, 1; debility, 1; debility, mental defect, 1; debility, cardiac disease, 2; coeliac disease, 1.

The ages of the children were :—0—5 years, 4 ; 5—10 years, 7 ; 10—15 years, 6. The altered diagnosis in each case was supported by repeated negative tuberculin reactions.

### Special Examinations and Treatment.

**ARTIFICIAL PNEUMOTHORAX.**—Two of the patients discharged during the year were considered suitable for treatment by means of artificial collapse of the lung. Both were spit positive on admission. One of these patients had a unilateral lesion and responded well to the treatment, the disease being quiescent on discharge, the spit absent and the patient's general condition good. The other patient had bilateral fibrotic lesions and remained spit positive after a long period of general treatment. Artificial pneumothorax was induced, and the spit became negative after the first refill. On discharge the general condition was excellent, there was no spit, and the disease was quiescent.

In one other case of bilateral tuberculosis, artificial collapse was attempted, but it was unsuccessful on account of adhesions. Ordinary sanatorium treatment, with the addition of intravenous injections of crisalbine resulted in a marked improvement in this case. He was ultimately transferred to Hairmyres on account of a tuberculous laryngitis.

**INTRAVENOUS CRISALBINE.**—Four patients, including the one above referred to, were considered suitable for this treatment. In all cases improvement was marked in X-ray appearances and in the patients' general condition. The sputum, however, remained positive in every case. Treatment was discontinued on account of the appearance in one case of spinal caries, and in another of renal tuberculosis and spinal caries. The third patient had treatment until his transfer to Hairmyres.

**ARTIFICIAL LIGHT TREATMENT.**—Suitable cases received this form of treatment, and the results in these selected cases were good.

**X-RAY EXAMINATIONS.**—As in former years, patients were sent to the County Hospital, Motherwell, for X-ray examination.

65 patients were X-rayed during the year.

**EAR, NOSE, AND THROAT SPECIALIST.**—7 cases were referred to the consultant, 1 of tonsils (tonsils enucleated at Stonehouse), 1 of laryngeal

tuberculosis, 4 of laryngitis, which proved to be non-tuberculous in origin, and 1 case of otitis media.

**EYE SPECIALIST.**—The consultant visited and examined 2 patients during the year. In both cases vision was markedly defective, and glasses were supplied.

**DENTAL TREATMENT.**—During the year Mr. Allan, L.D.S., made 5 visits to the Sanatorium, and treated 28 patients. The total number of extractions was 143, and of fillings, 0. Dentures were supplied to 2 patients; upper, 1; upper and lower, 1.

It is desired to make grateful recognition of the services of the local clergymen during the year, and of the entertainments to patients given by various parties.

### Administration.

**BUILDING AND GROUNDS.**—No building extensions were undertaken during the year. Necessary repairs were carried out as required.

**ACCOMMODATION.**—The accommodation was changed in December of this year and now consists of 43 beds and 12 cots, allocated as follows:—Adult males, 16; observation beds for juvenile males, 8; adult females, 19; cots, 12. The emergency bed in the side-room of Pavilion II is not included in this number.

**STAFF.**—The *Medical Staff* is non-resident, and consists of a Physician-Superintendent and a Visiting Physician. The *Nursing Staff* comprises the Matron, 2 general trained sisters, 4 staff nurses, and 4 probationers, while a sixth nurse is required during the holiday period. *Domestic Staff.*—1 cook, 1 laundress, and 9 maids. *Out-Door Staff.*—1 gardener-attendant (resident), 1 fireman, and 1 assistant gardener-attendant.

COUNTY OF LANARK MATERNITY HOSPITAL,  
BELLSHILL.

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REPORT BY THE PHYSICIAN SUPERINTENDENT,  
HENRY JAMES THOMSON, M.D., M.C.O.G.

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1937

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MEDICAL STAFF.

*Physician Superintendent*—HENRY JAMES THOMSON, M.D., M.C.O.G.

*Resident Assistant Physicians* (at periods during the year).

A. S. HUTCHESON, M.B., Ch.B., D.P.H.,	...	...	4/1/37
J. N. R. STEPHEN, M.B., Ch.B.,	...	...	10/4/37
R. PETTIGREW, M.B., Ch.B.,	...	...	15/9/37
G. H. G. HOPE, M.B., Ch.B.,	...	...	7/10/37
N. FRANK, M.B., Ch.B.,	...	...	10/10/37
J. M'GHIE, M.B., Ch.B.,	...	...	...
A. M'PHATER, M.B., Ch.B.,	...	...	...

*Matron*, ... .. Mrs. MACDOUGALL.

CONSULTANTS.

*Obstetrician and Gynaecologist*—S. J. CAMERON, M.B., F.R.F.P.S. (Glas.), F.C.O.G.

*Cardiologist*—GEO. A. ALLAN, M.D., F.R.F.P.S. (Glas.), F.R.C.P. (Lond.).

*Otologist*—JAMES ADAM, M.A., M.D., F.R.F.P.S. (Glas.).

*Ophthalmologist*—JOHN MORTIMER, M.D., M.R.C.P. (Edin.).

*Children's Diseases*—STANLEY GRAHAM, M.D., F.R.F.P.S. (Glas.).

*Urologist*—W. MACK, F.R.C.S. (Edin.).

*Dental Surgeon*—A. R. M'FARLANE, L.D.S., D.D.S.



## Report by the Physician Superintendent.

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The form of the Report conforms to the suggestion of the Royal Society of Medicine.

At the beginning of the year, 85 patients were resident in hospital, of whom 33 were babies. Adult admissions numbered 2,006. There were 1,504 babies, of whom 66 were born before admission and 91 were stillborn.

At the end of the year 86 patients remained in hospital, of whom 37 were babies.

The Report deals with discharges under the following headings :—

		1936	1937
(1) Delivered at or near full term, ...		1,327	1,410
(2) Delivered before admission, ...		71	71
(3) Discharged undelivered, ...	...	331	300
(4) Cases of abortion, ...	... *	226	209
(5) Gynaecological cases and others, ...	...	22	23
(6) Babies born alive, ...	... ..	1,309	1,409
		<hr/>	<hr/>
		3,286	3,422
		<hr/>	<hr/>

1. The accommodation has been taxed to its utmost.

2. The stillbirth rate was 6 per cent. as against 8·1 per cent. for 1936.

3. The maternal death rate is 2 per thousand (4 deaths) for all admissions, but if one excluded cases not classified as due to diseases of pregnancy, the maternal death rate is reduced to 1 per thousand. This is the lowest death rate recorded since the Institution was opened for maternity cases.

4. Of the 21 cases of puerperal pyrexia 12 were cases of sepsis. One suffered from empyema and one from myeloid leukaemia; 2 had wound sepsis after Caesarean Section and 1 anaemia of pregnancy; 4 had notifiable rises of temperature=21.

TABLE SHOWING ADMISSIONS AND DISCHARGES FROM 1ST JANUARY, 1937, TO 31ST DECEMBER, 1937.

				In Residence, 1/1/37.		Admitted.		Discharged.		Died.		In Residence, 31/12/37.	
Ante-natal,	...	...	9	299	300	—	8						
Confinement,	...	...	37	1,400	1,402	*4	31						
Abortion,	...	...	6	209	209	—	6						
Post-natal,	...	...	—	74	71	—	3						
Babies born alive,	...	...	33	1,413	1,357	52	37						
Gynaecological,	...	...	—	24	23	—	1						
				85	3,419	3,362	56	86					

\* Cardiac Disease, 2 ;

Pre-eclamptic Toxaemia, 1 ;

Pernicious Anaemia of Pregnancy, 1.

## STILLBIRTHS.

There were 91 stillbirths during the year. The probable causes of stillbirths, maternal and foetal, are given below :—

MATERNAL.				FOETAL.			
Eclampsia,	...	...	5	Prematurity,	...	...	3
				Macerated,	...	...	2
							— 5
Cardiac Disease,	...	...	3	Asphyxia,	...	...	1
				Prematurity,	...	...	1
				Macerated,	...	...	1
							— 3
Twins,	...	...	4	Negative,	...	...	2
				Toxaemia,	...	...	1
				Macerated,	...	...	1
							— 4
Malpresentations,	...	...	11	Asphyxia,	...	...	7
				Prolapsed Cord,	...	...	2
				Dystocia,	...	...	1
				Intracranial damage,	...	...	1
							— 11
Toxaemia of Pregnancy,	...	...	18	Lacerated,	...	...	15
				Premature,	...	...	3
							— 18

MATERNAL.				FOETAL.			
Placenta Praevia, ...	4			Prematurity, ...	4		
					—		4
Hydramnios, ...	6			Hydrocephalus, ...	1		
				Anencephaly, ...	3		
				Meningocele, ...	1		
				Negative, ...	1		
					—		6
Ante-partum Haemorrhage, ...	13			Prematurity, ...	13		
					—		13
Contracted Pelvis, ...	3			Macerated, ...	1		
				Craniotomy, ...	2		
					—		3
Delayed Labour, ...	11			Prolapsed Cord, ...	2		
				Intracranial damage, ...	4		
				Anencephaly, ...	1		
				Dystocia, ...	1		
				Spina bifida, ...	1		
				Macerated, ...	2		
					—		11
No apparent cause, ...	10			Macerated, ...	2		
				Anencephaly, ...	4		
				Intracranial damage, ...	1		
				Prolapsed Cord, ...	1		
				Negative, ...	1		
				Dystocia, ...	1		
					—		10
General Debility, ...	2			Congenital Debility, ...	1		
				Macerated, ...	1		
					—		2
Old standing sepsis in mother, ...	1			Prematurity, ...	1		
					—		1
	—						—
	91						91
	==						==

## MATERNAL DEATHS.

The causes of death were as follows:—

Cerebral haemorrhage and toxæmia of pregnancy, ...	1
Mitral stenosis and cardiac failure complicating pregnancy, ...	2
Pernicious anaemia of pregnancy, ...	1
	—
Total, ...	4



Born Alive.				Stillbirths.			
		Leg.	Illeg.			Leg.	Illeg.
Males,	...	692	61 = 753	Males,	...	53	4 = 57
Females,	...	588	64 = 652	Females,	...	32	2 = 34
		<u>1,280</u>	<u>125 = 1,405</u>			<u>85</u>	<u>6 = 91</u>

## Percentage of Illegitimate Children.

Born Alive.				Stillbirths.			
Males,	...	...	8.1	Males,	...	...	7.
Females,	...	...	9.8	Females,	...	...	6.

## Percentage of Stillbirths.

Legitimate,	...	...	6.6	Illegitimate,	...	...	4.8
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*Category A.*—Cases which have been under ante-natal supervision (*i.e.*, bed booked) :—

							1937	1936
1	Delivered in Hospital	...	...	...	...	...	1,169	1,126
2	Died undelivered,	...	...	...	...	...	—	—
3	Abortions,	...	...	...	...	...	3	3
4	Miscellaneous (B.B.A. and Ante-natal),	...	...	...	...	...	177	197
							<u>1,349</u>	<u>1,326</u>
Died,	...	...	...	...	...	...	2	1

*Category B.*—Cases sent in as emergencies (*i.e.*, bed not booked) :—

1	Delivered in Hospital,	...	...	...	...	...	237	200
2	Died undelivered,	...	...	...	...	...	—	1
3	Abortions,	...	...	...	...	...	206	224
4	Gynaecological,	...	...	...	...	...	23	22
5	Miscellaneous (Post-natal and Ante-natal),	...	...	...	...	...	194	204
							<u>660</u>	<u>651</u>
Died,	...	...	...	...	...	...	2	13

## ANTE-NATAL CASES—INDOOR.

There were 300 cases treated in the antenatal wards, and discharged undelivered during the year.

CASES ADMITTED TO ANTE-NATAL WARDS;  
DISORDERS OR ACCIDENTS OF PREGNANCY.

Disorder or Accident of Pregnancy.	Total Number of Cases.		Mother.	
			Lived.	Died.
1 Toxaemia of Pregnancy :—				
(a) Albuminuria, Pre-eclamptic and Nephritic Toxaemia, ... ..	63		63	—
(b) Eclampsia, ... ..	1		1	—
(c) Hyperemesis, ... ..	30		30	—
2 Ante-partum Haemorrhage, ... ..	10		10	—
3 Threatened Abortion, ... ..	27		27	—
4 Pulmonary Disease Non-Tuberculosis, ... ..	3		3	—
5 Pulmonary Tuberculosis, ... ..	5		5	—
6 Cardiac Disease, ... ..	12		12	—
7 Contracted Pelvis, ... ..	15		15	—
8 Urinary Sepsis with Pyelitis, ... ..	19		19	—
9 Discharged as not in labour, ... ..	53		53	—
10 Retroverted Gravid Uterus, ... ..	1		1	—
11 Gonorrhoea, ... ..	1		1	—
12 Leucorrhoea, ... ..	1		1	—
13 Abnormal Presentations and Hydramnios (1),	16		16	—
14 Anaemia and Debility, ... ..	15		15	—
15 Varicose Veins and Haemorrhoids, ... ..	3		3	—
16 Others, ... ..	25		25	—
	<hr/>		<hr/>	<hr/>
	300		300	—
	<hr/>		<hr/>	<hr/>



## CASES CONFINED IN HOSPITAL REFERRED FROM ANTE-NATAL CLINICS AND EMERGENCIES.

	Bellshill.	Shotts.	Cambuslang.	Blantyre.	Larkhall.	Totals.	Died.	Pyrexia.	Sepsis.
Cases who had ante-natal supervision :—									
1 Cases attending clinic until date of confinement.	212	71	106	76	36	501	—	1	4
2 Cases attending until one month prior to confinement.	67	17	18	6	2	110	—	—	2
3 Cases attending irregularly.	290	23	28	25	5	371	1†	4	1
4 Cases with only one attendance.	188	14	6	8	8	224	2§	—	1
Cases who had no ante-natal supervision.									
	757	125	158	115	51	1,206	3	5	8
	—	—	—	—	—	200	1*	4‡	4
	757	125	158	115	51	1,406	4	9	12

\* = Pre-eclamptic toxæmia.

† = Pernicious anaemia of pregnancy.

‡ = Myeloid leukaemia.

§ = Two cases of advanced cardiac disease on admission.

The following detailed tables are printed in the separate report issued by the Physician-Superintendent, but have not been reprinted in this volume owing to lack of space:—

1. Cases treated in the Hospital before labour.
2. Posterior position of the Occiput.
3. Twins.
4. Normal Breech Presentations.
5. Complicated Breech Presentations.
6. Shoulder Presentations.
7. Face and Brow Presentations.
8. Hydramnios.
9. Prolapse of Cord.
10. Forceps (labour not induced).
11. Induction of Labour (Normal Delivery).
12. Induction of Labour (Forceps Delivery).
13. Caesarean Section.
14. Version.
15. Embryotomy and Craniotomy.
16. Contracted Pelvis—Spontaneous Delivery, Induction of Labour, etc.
17. Cases of Albuminuria.
18. Eclampsia.
19. Accidental Ante-partum Haemorrhage.
20. Placenta Praevia.
21. Post-partum Haemorrhage.
22. Manual Removal of Placenta.
23. Cardiac Disease.
24. Sundry Cases.
25. Lacerations of Perineum, Vagina, etc.
26. Infants' Report.
27. Stillbirths.
28. Infant Deaths.
29. Foetal Abnormalities.
30. Ophthalmia.

## COMPLICATED LABOURS.

Category A.—i.e., Cases under ante-natal supervision :—

					Primi- parae.	Multi- parae.	Total.
1	Albuminuria,	...	...	...	29	26	55
2	Eclampsia,	...	...	...	2	1	3
3	Hyperpiesis,	...	...	...	4	7	11
4	Hyperemesis,	...	...	...	1	1	2
5	Pyelitis,	...	...	...	2	4	6
6	Contracted Pelvis,	...	...	...	11	13	24
7	Ante-partum Haemorrhage :—						
	(a) Placenta Praevia,	...	...	...	—	2	2
	(b) Accidental Haemorrhage,	...	...	...	2	3	5
8	Cardiac Disease,	...	...	...	2	4	6
9	Respiratory Disease,	...	...	...	3	5	8
10	Others :—						
	Uterine Displacements,	...	...	...	—	1	1
	Separation of Symphysis Pubis,	...	...	...	—	1	1
	Epilepsy,	...	...	...	1	—	1
	Cervicitis—non-gonococcal,	...	...	...	1	—	1
	Venereal Disease,	...	...	...	1	1	2
	Influenza,	...	...	...	2	—	2
	Lupus,	...	...	...	1	—	1
	Anaemia,	...	...	...	2	9	11
	Fibroid complicating pregnancy,	...	...	...	1	1	2
	Diabetes Mellitus,	...	...	...	1	1	2
	Others,	...	...	...	8	2	10
11	Malpresentations and Positions,	...	...	...	21	9	30
					<u>95</u>	<u>91</u>	<u>186</u>

## Category B.—i.e., Cases sent in as emergencies :—

					Primi- parae.	Multi- parae.	Total.
1	Albuminuria,	...	...	...	25	13	38
2	Eclampsia,	...	...	...	7	4	11
3	Hyperpiesis,	...	...	...	1	1	2
4	Hyperemesis,	...	...	...	1	3	4
5	Pyelitis,	...	...	...	2	—	2
6	Contracted Pelvis,	...	...	...	3	10	13
7	Ante-partum Haemorrhage :—						
	(a) Placenta Praevia,	...	...	...	—	8	8
	(b) Accidental Haemorrhage,	...	...	...	2	13	15
8	Cardiac Disease,	...	...	...	3	7	10
9	Respiratory Disease,	...	...	...	1	3	4
10	Others :—						
	Hydramnios,	...	...	...	—	8	8
	Anaemia,	...	...	...	1	—	1
	Epilepsy,	...	...	...	1	—	1
	Mastitis,	...	...	...	1	1	2
	Venereal Diseases,	...	...	...	2	—	2
	Others,	...	...	...	1	4	5
11	Malpresentations and positions,	...	...	...	12	6	18
					63	81	144

## ABORTIONS.

There were 209 cases of abortion, which have been classified as follows :—

Types.	Number.	Curettage.	Alive.	Died.	Pyrexia or Sepsis.	
					P.	S.
Complete, ... ..	127	—	127	—	—	—
Induction of Abortion, ...	23	10	23	—	1	—
Incomplete, ... ..	58	46	58	—	—	—
Missed Abortion, ... ..	1	—	1	—	—	—
	209	56	209	—	1	—

## POST-NATALS.

There were 71 cases in the above group, viz. :—

	Number.	Alive.	Died.	Pyrexia.	Sepsis.
B.B.A., ... ..	54	54	—	—	—
Post-partum haemorrhage and retained placenta, ...	6	6	—	—	—
Others, ... ..	11	11	—	—	—
	71	71	—	—	—

## GYNAECOLOGICAL.

There were 23 cases treated during the year, viz. :—

Group.	Number.	Alive.	Died.
Sterility, ... ..	2	2	—
Uterine displacements, ...	1	1	—
Endometritis and Metritis, ...	1	1	—
Others, ... ..	19	19	—
	23	23	—

## CONTRACTED PELVIS.

There were 38 cases of contracted pelvis confined, of which 24 had been under ante-natal supervision and 14 were emergency cases. There were no maternal deaths, 6 stillbirths and 4 neo-natal deaths.

CASES UNDER ANTE-NATAL SUPERVISION (*Category A*).

Mode of Delivery.	No. of Cases.	Mother.		Child.		
		A.	D.	A.	SB.	D.
Spontaneous, ... ..	5	5	—	3	1	1
Induction of Labour, ... ..	9	9	—	9	—	—
Forceps Delivery, ... ..	1	1	—	—	—	1
Caesarean Section, ... ..	9	9	—	8	—	1
	24	24	—	20	1	3

CASES SENT IN AS EMERGENCIES (*Category B*).

Mode of Delivery.	No. of Cases.	Mother.		Child.		
		A.	D.	A.	SB.	D.
Forceps Delivery, ... ..	2	2	—	—	2	—
Caesarean Section, ... ..	7	7	—	7	—	—
Craniotomy, ... ..	2	2	—	—	2	—
Induction of Labour, ... ..	3	3	—	2	—	1
	14	14	—	9	4	1



## ECLAMPSIA.

The undernoted table shows the list of cases of eclampsia treated during the last ten years, with the number of deaths and the percentage maternal mortality :—

Year.	Cases.	Died.	Percentage Mortality.
1928	24	2	8·3
1929	22	3	13·6
1930	38	4	10·5
1931	8	2	25·0
1932	9	2	22·2
1933	13	2	15·3
1934	12	2	16·6
1935	17	1	5·8
1936	26	5	19·2
1937	17	—	—
	<u>186</u>	<u>23</u>	<u>12·3</u>

A or No. B	Reg. No.	Age.	Gravida.	Maturity.	Type of Labour.	Method of Delivery.	Cause of Temperature.	Duration of Temperature.	Result. M C	Remarks.
1 B	59	41	10	40	Normal.	Spontaneous.	Subinvolution— Chest condition.	3rd-5th day.	T'fd. A	Blood transfusion— Pre-eclamptic toxaemia.
2 A	181	21	1	40	Post position.	Forceps.	? Retention of urine.	Swinging 2nd-8th day.	I.S.Q. A	Extensive bruising of vaginal mucosae. To Motherwell Hosp.
3 B	259	28	4	40	Spontaneous.	Forceps.	Empyema of right pleural cavity.	1st-8th day.	I.S.Q. A	To Motherwell Hosp.
4 B	275	36	8	40	Normal (Twins).	Spontaneous.	Marked anaemia.	Swinging 10-17 day.	Imp. A — A	— Improved with Liver Therapy.
5 B	503	30	3	40	Delayed.	Craniotomy.	?	3 days.	T'fd. SB	Failed forceps before admission. To Motherwell Hosp.
6 A	509	20	1	39	Normal.	Spontaneous.	Lochia suppressed.	24 hrs.	T'fd. A	Very ill. To Mother- well Hospital.
7 A	555	22	1	42	Normal.	Spontaneous.	? Engorged breasts.	24 hrs.	T'fd. A	Poor condition. Slight post-partum hae- morrhage. To Motherwell.
8 B	539	25	1	28	Ind. of labour. 1st and 2nd st.	Spontaneous.	Lochia scanty.	12 hrs.	T'fd. D	Marked anaemia. Septic forefinger. To Motherwell.
9 A	550	19	1	40	Normal. 3rd st. Retained placenta.	Spontaneous.	?	24 hrs.	T'fd. A	Manual removal of placenta. Chorion and amnion deficient To Motherwell Hosp.

## MORBIDITY—Continued.

A or No. B	Reg. No.	Age.	Gravida.	Maturity.	Type of Labour.	Method of Delivery.	Cause of Temperature.	Duration of Temperature.	Result. M C	Remarks.
10 B	880	25	3	38	—	Caesarean Section.	Chest condition.	48 hrs.	A A	Wound healed clean.
11 B	1003	25	1	36	Ind. of labour.	Spontaneous.	Lochia foul. Con- dition very poor.	3 dys.	T'fd. D	Rheumatic fever, March, 1937. Chorea since.
12 A	877	25	1	40	Caesarean Section with sterilisation.	—	Wound discharging.	5 dys.	A A	Phthisis and lupus. Wound almost healed on dismissal.
13 A	1183	23	2	40	Normal.	Spontaneous.	Large blood clot , expelled.	24 dys.	A A	Anaemic.
14 A	1136	35	4	40	Normal.	Spontaneous.	None apparent.	Intermittent.	A A	Had cough and "cold."
15 A	1483	24	1	40	Delayed labour.	Forceps.	Foul lochia.	48 hrs.	Worse SB	To Motherwell Hosp.
16 A	1471	18	1	40	Normal.	Spontaneous.	Lochia scanty.	48 hrs.	A A	—
17 A	1534	25	1	40	Delayed labour.	Forceps.	—	Swinging 48 hrs.	Worse A	To Motherwell Hosp.
18 A	1513	26	2	40	Normal.	Spontaneous.	Nothing apparent.	12 hrs.	A A	—
19 B	1776	41	13	40	Normal.	In own home. Retained placenta— manual removal.	—	24 hrs.	T'fd. A	Referred by own doctor. Blood trans- fusion given in own home before removal of patient.
20 A	1784	30	3	40	Normal.	Spontaneous.	—	Swinging	Worse A	Transferred to Mother- well Hospital.
21 A	1975	23	1	40	Twins— Retained placenta.	Spontaneous.	Manual removal of placenta.	24 hrs.	— SB Worse A	Twins; To Motherwell Hospital.

	Discharged.	Died.
Number of Ante-Natal Cases, ... ..	300	—
Number of Cases of Puerperal Sepsis, ... ..	12	—
Number of Deaths from Puerperal Sepsis, removed to Isolation Hospital, ... ..	—	1
Number of Cases of Puerperal Pyrexia (D.O.H.), ...	9	—
Number of Cases of Puerperal Sepsis and Pyrexia, ...	21	—
Rate per 1,000 births Puerperal Sepsis=7·9.		
Rate per 1,000 births, Puerperal Sepsis and Pyrexia (D.O.H.)=13.		
Number of Cases of Morbidity :—		
Cases of Sepsis, ... .. 12	} =23=15·2 per 1,000.	
Cases of Pyrexia (D.O.H.), 9		
Deaths of Cases confined, 2		
Number of Cases of Abortion, ... ..	209	—
Number of Deaths after Abortion, ... ..	—	—
Total Discharges, ... ..	1,986	4
Death rate per 1,000 Discharges=2 per 1,000.		
Death rate excluding Cardiac Disease=1 per 1,000.		

SUMMARY OF MATERNAL DEATHS AND DEATH RATES IN HOSPITAL SINCE 1922.

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Sepsis, ...	2	2	1	4	—	1	—	1	—	—	4	1	1	—	1	—
Obstetric Shock and Post-partum Haemorrhage, ...	—	—	1	2	1	2	1	2	3	2	1	3	—	1	2	—
Eclampsia, ...	1	4	7	5	3	2	1	3	3	1	1	2	2	1	5	—
Pre-eclamptic Toxaemia, ...	2	4	3	4	2	1	1	1	3	2	3	2	2	1	2	1
Accidental Haemorrhage, ...	—	1	1	—	1	—	1	—	1	1	2	—	2	—	—	—
Placenta Praevia, ...	5	2	—	2	1	—	—	—	2	—	—	—	—	—	—	—
Others, ...	2	—	2	2	4	1	3	5	1	4	1	2	5	5	4	1
TOTALS, ...	12	13	15	19	12	7	7	12	13	10	12	10	12	8	14	2
Rate per 1,000 Live Births, ...	56	45	45	38	19	10	10	23	19	13	13	9	9	6	11	1.4
Deaths not classified as Maternal Deaths, ...	3	—	4	—	—	1	1	1	4	—	—	—	1	—	—	2
TOTALS, ...	15	13	19	19	12	8	8	13	17	10	12	10	13	8	14	4
Live Births, ...	213	288	334	501	643	712	667	525	663	741	935	1,049	1,303	1,337	1,311	1,413

## THE PREVENTION OF PUERPERAL SEPSIS.

As puerperal sepsis is accountable for about 40 per cent. of all maternal deaths, it is incumbent on all obstetricians to evolve a safe technique which will render the patient immune from any source of infection. This is all the more necessary when the opinion prevailing to-day is that practically all infections are of extraneous origin. The public to-day seems to be well aware of this fact that the accoucheur is the offending party when puerperal sepsis does occur, and the reputation of the doctor or nurse is thereby much depreciated.

It may be brutal to lay the cause of death of an obstetric case at anyone's door, but infection is easily transmitted to the patient, especially by careless technique. Infection should rarely or ever occur where precautionary measures are taken.

The attendant should be a person of a high standard of integrity, and not without zeal for this branch of the profession, so that the very performance of duty becomes a pleasure. It is gratifying that well-trained nurses are replacing the ill-equipped nurses of the past, who knew little or nothing of aseptic or antiseptic principles. Furthermore, it requires an attendant with patience, perseverance, tact, capable and of sound judgement and common sense to fill the niche of a successful maternity nurse.

One should remember that, in a maternity scheme, to get the best services, the financial side must not be neglected or overlooked, as the strain upon a maternity attendant is great, and without fixed hours of duty, financial remuneration should be much in excess of that paid in other spheres of nursing, as the responsibilities and issues are great.

In the old days the accoucheur arrived at the case equipped with a little black bag and addressed the patient in something like the following terms, "Get into bed so that I may make an internal examination!" Regrettable, nevertheless true, that this custom still holds sway to-day. The woman feels within herself that there is a lack of attention on the attendant's part if an internal examination is not made; she feels that such examination is something of practical importance, while, if she only knew the reason, she would realise the benefit it is to herself not to have such an examination made. The process of education of this technique will soon alter the old



custom of making routine vaginal examinations. In the prevention, then, of puerperal sepsis greater stress must be laid on pre-natal care, and this should be begun as soon as the patient realises that she is pregnant. In early pregnancy one can anticipate abnormalities that may arise at full term during the physical examination of the patient. Those abnormalities not only endanger the health of the mother, but may bring an unfruitful end to the pregnancy.

If pre-natal care has not been carried out, the experienced doctor, by abdominal examination, knows if labour is progressing satisfactorily and only resorts to vaginal examination if complications are anticipated.

It has been our experience that many cases admitted to hospital have the history of having had numerous internal examinations in the early stages of labour, while in this hospital internal examinations are not allowed until the patient shows signs of delay in delivery, with the usual accompanying symptoms indicative of on-coming exhaustion.

The attendant should be scrupulously careful of teeth; absence of nasal and throat discharges, and frequent swabbing of the throat should be practised. Personal toilet is not to be neglected, with the usual cleansing of hands and arms with an efficient antiseptic at the time of delivery.

A further aid of prevention is that there should be no attempt to control the fundus uteri or express the placenta until two hours after delivery. The idea underlying this is that failure to expel the placenta drives blood clots into the vagina, which are replaced after releasing hold of the fundus; the cavity of the uterus relaxes and septic material is drawn up from the vagina.

It was at one time thought that leaving the uterus to nature would produce post-partum haemorrhage, but this is not the case. The incidence of post-partum haemorrhage has decreased. Furthermore, it is only consistent to believe that nature intended the period after the second stage to be one of rest and not continuous stimulation to an already exhausted organ.

During labour and in the lying-in period the patient as well as the attendants should wear masks whenever the patient's body is exposed for dressing or toilet.

It is also essential in hospital practice to have a high standard of cleanliness, and the sterilising of beds, bedding and aerial disinfection should be carried out after the discharge of every patient.

During the past 4 years, 5,125 women have been confined in the Institution, of whom 35 developed puerperal sepsis and 5 died, giving the incidence for puerperal sepsis of 6·6 per 1,000, and a death-rate of 1 per 1,000.

The above cases have been treated with calcium sulphide, as explained in last year's report, and the results obtained in this Institution show a puerperal sepsis rate of 6·6, whereas during this year, in a limited number of cases treated with prontosil, the rate was 43·5 per 1,000. I am of opinion that active principle in the prevention and cure of puerperal sepsis lies in the sulphur content of either compound together with the technique indicated above, and it is my opinion that the time has arrived for the chemist to provide a sulphur salt which will have the strongest possible destructive effect on micro-organisms and one which will be easily absorbed by the blood stream.

With reference to the prevention of puerperal sepsis, an experiment was tried here by dividing the lying-in accommodation into three sections :—

- (1) Thirteen beds for Calcium Sulphide during the puerperium. Normal (44) and abnormal cases (25).
- (2) Fourteen beds for Prontosil for normal cases (52) and abnormal (18).
- (3) Sixteen beds for control cases. Normal cases (60) and abnormal (11).

Results :—

- (1) No cases of pyrexia.
- (2) 3 cases of puerperal sepsis.
- (3) 2 cases of puerperal sepsis.

Total cases treated, 210.

It was decided to revert to calcium sulphide treatment again, and the results for the year are :—

					Puerperal Sepsis.	
					Cases.	Rate per 1,000.
(1) Calcium Sulphide,	...	...	1,364	7	5.2	
(2) Prontosil,	...	...	69	3	43.5	
(3) Controls,	...	...	71	2	28.1	

Results after removal to Isolation Hospital :—

(1) No Deaths.

(2) No Deaths.

(3) 1 Death.

The staff of the Institution is as follows :—

1 Physician Superintendent.

2 Resident Assistant Medical Officers.

1 Consulting Gynaecologist.

1 Consulting Cardiologist.

1 Consulting Physician for ear, nose and throat.

1 Consulting Ophthalmologist.

1 Consulting Physician for diseases of children.

1 Consulting Urologist.

1 Dental Surgeon.

1 Matron.

5 Sisters.

10 Staff Nurses.

2 Outdoor Nurses.

Maids.

4 Chauffeurs.

3 Firemen.

2 Typists.

1 Sewing Maid.

There are, in addition, 38 pupils taking the course of midwifery training.

## TRAINING OF PUPIL MIDWIVES.

Year.			Nurses Admitted.	Free Training.	Deposit Only.	Fee Paying.	Total Fee.
1921-22,	...	...	13	10	—	3	£60
1923,	...	...	17	7	—	10	114
1924,	...	...	21	1	5	15	199
1925,	...	...	26	1	6	19	373
1926,	...	...	26	—	2	24	500
1927,	...	...	12	—	4	8	180
1928,	...	...	19	2	10	7	180
1929,	...	...	25	1	15	9	200
1930,	...	...	25	—	9	16	184
1931,	...	...	31	—	3	28	283
1932,	...	...	40	—	15	25	210
1933,	...	...	48	—	15	33	291
1934,	...	...	54	—	8	46	329
1935,	...	...	55	—	12	43	226
1936,	...	...	72	—	—	38	192
1937,	...	...	73	—	—	—	—
			557	22	104	324	3,521

Payments by patients amounted to £1,447 15s. 8d.

From 16th July, 1936, pupils have been paid a salary at the rate of £42 per annum, and no fees accepted.

## MATERNITY OUTFITS.

The following equipment is sterilised and packed at the hospital in sealed packets and sold for 4s. 6d. each through the medium of the Child Welfare Centres. A 12-inch basin is now added to the equipment and the selling price remains the same :—

- 12 Sanitary Towels.
- 4 Doz. Swabbing Squares.
- 1 Yard Jaconet.
- 2 Square Gauze Tissues, 19 ins. by 16 ins.
- 3 Cord Ligatures.
- 6 Cord Dressings.
- 1 Doz. Assorted Safety Pins.
- 1 12-in. Basin.
- 1 Doctor's Towel.
- 1 Nail Brush.
- 1 Piece of Soap.
- 1 Basin.

## AMBULANCE MILEAGE.

The total number of miles run by the two ambulances during the year 1937 was 55,253 miles.

The total working days lost through sickness were :—

Nurses,	...	...	...	...	...	679 days.
Maids,	...	...	...	...	...	414 days.

The causes of illness were :—

- Common Cold.
- Tonsillitis.
- Influenza.
- Septic Fingers (4).
- Cellulitis of Arm.
- Fracture.

## MATERNAL DEATHS.

A  
or  
B Reg No.

- B 1800 Mitral Stenosis complicating pregnancy. Attended ante-natal clinic on day of admission; she complained of breathlessness, cough and swelling of the ankles. Three years' history of heart trouble. On examination, was found to be  $5\frac{1}{2}$  months pregnant. Was pale and under-nourished. There was rapid heart rate, cardiac enlargement and systolic and diastolic murmurs at mitral area. In the chest there was congestion. Oedema of legs marked. For five days after admission she improved with rest and cardiac tonics, but after that oedema of the limbs increased. Six days after this the membranes were ruptured and two days later she was delivered of a live child. After delivery the compensation of the heart failed and she gradually became more dyspnoeic and oedematous. Twelve days after delivery became comatose and died.
- B 368 Pre-eclamptic Toxaemia. Attended ante-natal clinic on day of admission. The history given was that she had headaches for three months and that her sight had been failing for a week. On examination he was found to be  $8\frac{1}{2}$  months pregnant. There was marked albuminuria and the blood pressure was 236/130. Labour was induced by rupturing the membranes one day after admission and the same day she was delivered of a male live child. In the first few days of the puerperium, the condition remained unchanged. Subsequently, she became restless, the headaches were worse and the vision bad. Venesection was done, giving a fall in the blood pressure, but it rose again. Ten days after admission she developed a left-sided haemeplegia, became comatose and died.
- A 647 Mitral Stenosis complicating pregnancy. History of chorea in childhood. Previous to present admission had been in this hospital for five weeks with commencing cardiac failure. Was improved on dismissal, but was in bed at home. On examination was 8 months pregnant. The heart rate was rapid and regular, the cardiac area was enlarged and there were diastolic and systolic murmurs at the mitral area. No congestion of the lungs or liver, but there was slight oedema of the legs. Seven days after admission she was confined normally of a live male child. After confinement the cardiac failure became much more marked. The oedema increased, the lungs became congested, also there was sloughing of the vagina. Eleven days after confinement she took a more acute form of cardiac failure, and gradually sank into coma, followed by death.



- A 1614 Pernicious Anaemia of Pregnancy. Was admitted after second ante-natal visit; she complained of breathlessness and weakness. On examination was 7 months pregnant; was well nourished, but had a yellowish pallor. The tongue was smooth and glossy. Blood count—red cells 1,200,400; white cells, 8,200; haemoglobin 35 per cent. The next day she was given a blood transfusion. This was followed by a severe reaction; she had iron by mouth and liver extract hypodermically. Four days after admission she gave birth to a stillborn premature male child; the blood loss at birth was not excessive. Three days after the birth the blood count was:—Red cells, 1,500,000; white cells, 9,800; haemoglobin, 32 per cent. Four days after the birth the haemoglobin was 25 per cent. She did not respond to a further transfusion, in addition to the liver and iron, and died 8 days after confinement.

#### SPECIMENS SENT TO COUNTY LABORATORY DURING 1937.

Specimen.	Positive. Negative. Total.			Per- centage Positive.
Throat swabs for <i>S. Haemolyticus</i> —Staff, nursing, ... ..	176	4,311	4,487	3.9

#### SPECIMENS SENT FOR ASCHIEM-ZONDEK TEST—PREGNANCY DIAGNOSIS LABORATORY, EDINBURGH.

No. of Specimens Sent.	Results.	In accordance with progress of symptoms.	Incorrect Results.
62	Positive, ...	28	60
	Negative, ...	22	2
	Death of foetus, ...	4	
	Uncertain, ...	4	
	Others, ...	4	
		62	

## SPECIAL OUTDOOR EMERGENCY TREATMENT.

This sphere of treatment is continuing and shows its effect on a reduced maternal mortality in cases treated in hospital and within the Local Authority's area.

In the indoor series the maternal mortality is 1 per 1,000 admissions, while the rate based on the number of live births is 1.4 per 1,000.

In reviewing the deaths that have occurred in this Institution during the last 16 years it is arresting and interesting to note that the death-rate has fallen progressively from 56 per thousand live births in 1922 to the abnormally low figure of 1.4 per thousand in 1937. There are many factors concerned in this marked reduction in the maternal mortality.

In 1922 a rate of 56 per thousand was accounted for by the fact that women in this district had not become accustomed to hospital treatment for their confinement and many refused to be transferred from their homes to the Maternity Hospital until forced to do so by serious complications. Some died in the ambulance while being brought in and several died shortly after admission. There is, to my mind, an unparalleled experience where four cases of central placenta praevia were removed from the practice of one practitioner within a period of three months and all died very shortly after admission. Cases of eclampsia were also kept at home until they were beyond aid. In 1925, on account of deaths in the ambulance or shortly after admission, I was of the opinion that it would be better to treat such cases in their own homes, but it was not until 1931 that the County Council gave sanction to this new procedure in maternity work. In this sphere of the work I have not been disappointed as is manifest by the reduction of deaths in the combined indoor and outdoor cases. The following table shows the working of the emergency squad from the years 1933 to 1937. It is interesting to note that two of the patients in this emergency work died before the homes were reached and two shortly after arrival at the home.

EMERGENCY WORK.

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	1933.		1934.		1935.		1936.		1937.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Post-partum hæmorrhage, ...	6	—	7	—	4	—	3	—	8	*1
Post-partum Haemorrhage and Adherent Placenta, ...	2	—	2	1	4	—	6	1	5	1
Ante-partum Haemorrhage, ...	4	—	5	—	3	—	5	*1	2	—
Abortion, ...	4	—	9	—	10	—	19	1	9	—
Eclampsia, ...	4	—	10	†2	13	—	5	—	11	—
Toxaemia of Pregnancy, ...	4	—	10	2	4	—	7	—	1	—
Delayed Labour, ...	2	—	—	—	6	—	4	—	5	—
Acute Sepsis, ...	1	—	—	—	—	—	1	—	—	—
Cardiac Disease, ...	—	—	2	—	2	1	—	—	—	—
Obstetric Shock, ...	—	—	2	—	2	—	—	—	2	—
Prencious Anaemia, ...	—	—	—	—	—	—	—	—	2	—
Post-natal Pneumonia, ...	—	—	—	—	—	—	—	—	2	—
Ante-natal Consultations, ...	6	—	5	—	11	—	24	1	30	—
Post-natal Consultations, ...	—	—	—	—	—	—	—	—	7	—
	33	—	52	†5	59	1	74	*4	84	*2

\* died 15 minutes after arrival.  
† 2 died before arrival of squad at the home.

The undernoted is a statement showing the cases of consultation and complications dealt with during the year :—

#### CONSULTATIONS WITH GENERAL PRACTITIONERS.

Ante-natals, ... ..	31	
Post-natals, ... ..	7	
	—	38

#### CASES ATTENDED IN OWN HOME.

Post-natal Pneumonia, ... ..	2	
Delayed Labour, ... ..	5	
Post-partum Haemorrhage, ... ..	8	
Abortion, ... ..	9	
Retained placenta with post-partum haemorrhage, ...	5	
Eclampsia, ... ..	11	
Pernicious anaemia, ... ..	2	
Ante-partum haemorrhage, ... ..	2	
Obstetric Shock, ... ..	2	
	—	46

#### REVISITS MADE TO CASES.

Eclampsia, ... ..	10	
Obstetric Shock, ... ..	2	
• Post-partum Haemorrhage, ... ..	2	
Pneumonia, ... ..	3	
	—	17
	—	
Total Number of Visits, ... ..	101	

#### Number of Deaths :—

Retained placenta (anaesthetic), ... ..	1	
Post-partum haemorrhage, ... ..	1	
	—	2
		—

## SPECIAL CASES (EMERGENCY OUTDOOR WORK), ETC.

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A  
or Reg.  
No. B No.

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- 1 B      59 (Pre-eclamptic Toxaemia). Obstetric Shock. Collapsed after short labour and spontaneous delivery. Blood transfusion, 22 ozs. and gum acacia, 15 ozs. given. Had rigour, but later settled—pulse and colour improved. Rise of temperature third day—subinvolution. Chest condition. Patient critically ill. Transferred to Motherwell Hospital.
  
- 2 A      57 B.B.A. with retain placenta and some post-partum haemorrhage. Child delivered in own home and cord cut by neighbour. Improperly ligatured. Patient in collapsed condition on admission. Had brisk post-partum haemorrhage and placenta still in utero. Blood transfusion given. Good recovery. Under light anaesthetic placenta expressed by Crede's method.
  
- 3 A      4 Secondary post-partum haemorrhage. Sixth day of puerperium. Patient had normal confinement—well till 6th day—had brisk post-partum haemorrhage—piece of membrane expelled. Blood transfusion OI given. Pituitrin 1 c.c. (H.I.) given. General anaesthetic given—digital curettage done and succenturiata lobe of placenta removed. Uterus packed. Removed in 8 hours. Progress fairly satisfactory. Patient anaemic.
  
- 4 B      33 Abortion—Secondary anaemia. Digital curettage done. Blood transfusion OI given; recovery fairly good. Had influenzal cold later.
  
- 5 B      221 Adherent placenta and obstetric shock. Confined in own home by midwife. Attempts to expel placenta failed; on admission to hospital, condition poor. Sedatives given—shock treated. Placenta removed manually. Blood transfusion given OI, with gum saline OI. Puerperium uneventful. General condition much improved.
  
- 6 B      158 Central placenta praevia. Collapsed on admission. Internal podalic version done. Blood transfusion given OI. Delivered of stillborn child; loss normal. Blood transfusion given and gum saline, Bland's and liver extract given during puerperium. Recovery good.

- 7 — — Retained placenta and post-partum haemorrhage. History of intermittent slight ante-partum haemorrhage. Forceps delivery of stillborn child by own doctor in own home. Placenta removed manually. On arrival patient pale—pulse poor quality and rapid. Blood transfusion with gum saline given IVI. Good recovery.
- 8 B 383 Ante-partum haemorrhage. Mixed type. Patient badly shocked on admission. Condition treated. Membranes ruptured artificially — confined spontaneously of stillborn child. Placenta and membranes—loss normal. Blood transfusion with gum saline OI given IVI. Good recovery.
- 9 A 305 Slight ante-partum haemorrhage. Anaemia. Very weak and pale after normal confinement. Blood transfusion,  $\bar{5}$ XXIV given. Recovery good.
- 10 A 702 Post-partum haemorrhage after normal delivery of stillborn child. Placenta expelled complete. Blood transfusion given. Recovery good.
- 11 B 716 Toxaemia of pregnancy—Post-partum haemorrhage. Induction of labour and normal delivery of live child. Brisk haemorrhage. Pitocin (H.I.) given. Shock treated. Blood transfusion OI and anaemia treated puerperium. Recovery good.
- 12 A 741 Adherent placenta—manually removed after spontaneous delivery of live child. Patient badly shocked. Blood transfusion given. Iron and liver extract given in puerperium. Recovery good.
- 13 B 782 Secondary anaemia—after ante-partum haemorrhage. Condition of patient after confinement, poor. Rise of temperature and rapid pulse second day. Blood transfusion given OI. Iron tonic and liver extract given. Improved markedly.
- 14 E — Post-partum haemorrhage and obstetric shock following delayed labour with forceps delivery of stillborn monster child. Patient collapsed—pulse rapid and thready. Blood transfusion OI with gum saline given. Condition of patient improved. Pulse slower—120—stronger. Remained in own home.
- 15 B 1195 Post-natal—Eclampsia. Treated and delivered in own home before admission. Had brisk haemorrhage after delivery. Very ill same evening. Coramine and stimulants given. Improved. Admitted to hospital. General condition poor—temperature elevated. Blood transfusion given. Iron tonics given. Improved slowly.



- 16 E — Retained placenta—Post-partum haemorrhage. Confined by own doctor. Placenta retained for  $3\frac{1}{2}$  hours. Patient badly shocked. Placenta expressed by Crede's method. Rectal saline with brandy given. Pulse weaker—some vomiting. Blood transfusion given OI. Recovery good.
- 17 E — Post-partum haemorrhage. Confined of stillborn child by own doctor. Patient's condition poor. Fair amount of bleeding—pulse thin and rapid. Blood transfusion OI. Puerperium uneventful after.
- 18 E — Miscarriage—but had fair loss ante-partum—slight post-partum haemorrhage after.IVI of gum saline OI given by Airdrie doctor. Patient's condition did not improve. Marked shock—pulse thin—mucous membrane blanched. Blood transfusion OI given. Sedatives given (H.I.). Marked improvement of patient's condition.
- 19 B 1403 Admitted as ? Incomplete Abortion—history of bleeding for 5 months at intervals. Condition poor. Blood transfusion OI given. Liver extract given daily. Improved. Blood transfusion OI again given one week later. Right oophorectomy performed. Condition slowly improved.
- 20 E — Pernicious anaemia—condition very poor. Blood transfusion OI given. Had rigor shortly after. Condition treated. Improvement very slow.
- 21 A 1614 Pernicious anaemia of pregnancy. Admitted in very poor condition. (1) Blood transfusion OI given—followed by severe reaction—rigor—sweating—breathlessness. Some improvement after. Blaud's Liver Extract given. Chest condition present—oxygen, etc., given. Confined spontaneously. Blood count very low. Campolon given (I.M.I.) daily. (2) Blood transfusion Oss given—again reaction—rigor (Donor group IV also direct test). Patient gradually weakened—Died.
- 22 B 1497 Abortion—Incomplete—Blood transfusion OI given and repeated following day. Condition slowly improved. Satisfactory recovery.
- 23 B 1776 Retained placenta after confinement in own home; attended by midwife and own doctor. Fair amount of haemorrhage. Badly shocked. Blood transfusion OI. Admitted to hospital following day.
- 24 E — Abortion—incomplete. Had lot of haemorrhage. Own doctor in attendance. Blood transfusion OI given—improvement noted. Patient admitted to hospital following day.

- 25 E — Post-partum haemorrhage. Confined normally in own home—midwife and doctor in attendance. Brisk haemorrhage followed. Condition became rapidly worse in spite of treatment. Blood transfusion attempted, but veins too collapsed. Patient died.

*N.B.*—History of post-partum haemorrhage after each of seven confinements, also patient was very anaemic during pregnancy. Treated at home.

- 26 A 1942 Retained placenta—brisk haemorrhage after birth of child. Blood transfusion OI given. Placenta expressed (CHC12). Good recovery.

- 27 A 1975 Retained placenta—after twin confinement. Manual removal of placenta. Patient very pale—pulse fair. Blood transfusion given OI. Little improvement. Temperature rose evening third day. Transferred to County Hospital, Motherwell.

### BLOOD TRANSFUSIONS.

	In Hospital.						At Home.
Obstetric Shock,	...	...	...	...	...	1	—
Retained placenta with post-partum haemorrhage,						5	1
Post-partum haemorrhage,	...	...	...	...		4	5
Abortion,	...	...	...	...	...	4	2
Placenta praevia,	...	...	...	...	...	2	—
Ante-partum haemorrhage,	...	...	...	...		1	—
Secondary anaemia,	...	...	...	...	...	1	—
Pernicious,	...	...	...	...	...	2	1
						—	—
						20	9
						==	==

Total=29.

## CONSULTATIONS AND OPERATIONS.

*Obstetrician and Gynaecologist.*

Caesarean Section, ...	18	Previous obstetric history bad, ... ..	4
		Contracted pelvis, ...	14
Induction of Labour, ...	40	Epilepsy, ... ..	2
		Cardiac disease, ... ..	5
		Toxaemia of pregnancy,	24
		Contracted pelvis, ...	7
		Hydramnios, ... ..	2
Induction of Abortion, ...	5	Hyperemesis, ... ..	3
		Chorea, ... ..	1
		General debility with marked loss of weight,	1
Laparotomy, ... ..	1	? Rupture of uterus, ...	1
Dilatation and Curettage,	12	Abortion, ... ..	7
		Sterility, ... ..	3
		Gynaecological conditions,	2
Oophorectomy, ... ..	1	Right salpingitis, ...	1
Examination, ... ..	31	Post-natal, ... ..	1
		Gynaecological, ... ..	1
		Contracted pelvis, ...	15
		Hydatidiform mole, ...	1
		Spurious pregnancy, ...	5
		Chorea, ... ..	1
		Missed abortion, ... ..	1
		Toxaemia of pregnancy,	1

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*Cardiologist.*

Cardiac Disease, ... ..	5
Profound Anaemia, ... ..	1

*Ophthalmologist.*

Consultation for baby's eye, ... ..	1
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*Children's Disease.*

Pyrexia, ... ..	2
Cerebral oedema, ... ..	2
Congenital heart con- dition, ... ..	2

*Urologist.*

Pyelitis, ... ..	1
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## ANTE-NATAL CLINICS.

	Cambus-					Total.
	B.M.H.	Shotts.	Blantyre.	lang.	Larkhall.	
Normal, ... ..	463	83	71	97	36	750
Albuminuria, ... ..	75	4	16	27	9	131
Hyperpiesis, ... ..	71	14	4	22	6	117
Hyperemesis, ... ..	12	10	3	3	6	34
Pyelitis, ... ..	3	1	2	2	—	8
Abnormal Present, ... ..	40	3	3	5	2	53
Hydramnios, ... ..	5	—	—	—	1	6
Contracted Pelvis, ... ..	26	2	7	4	4	43
Cardiac Disease, ... ..	24	9	10	19	3	65
Respiratory, ... ..	16	4	6	10	2	38
Ante-partum Haemorrhage and Threatened Abortion, ... ..	33	7	4	7	4	55

	Cambus-					Total.
	B.M.H.	Shotts.	Blantyre.	lang.	Larkhall.	
Leucorrhoea, ... ..	21	9	9	7	2	48
Varicose Veins and Haemorrhoids, ... ..	23	17	9	17	8	74
Dental Caries, ... ..	174	22	23	40	13	272
Previous Abnormalities,	46	8	6	5	5	70
Anaemia and Debility,	36	12	13	17	8	86
Others, ... ..	100	47	26	29	11	213
	1,168	252	212	311	120	2,063

Cases referred to Ante-natal Wards, ... ..	58	12	4	7	6	87
Cases referred to family doctor, ... ..	26	4	1	6	1	38
Cases referred to Child Welfare Centre, ... ..	59	1	—	—	2	62
Cases treated at Ante-natal Clinics, ... ..	1,025	235	207	298	111	1,876
Number of First Visits,	1,168	252	212	311	120	2,063
Total No. of Attendances,	3,705	1,038	992	1,545	493	7,773

## POST-NATAL, GYNAECOLOGICAL AND OTHERS.

			B.M.H.	Shotts.	Blantyre.	Cambus- lang.	Larkhall.	Total.
<i>Post-natal.</i>								
Debility,	...	...	1	2	—	—	—	3
Albuminuria,	...	...	—	1	—	3	2	6
Others, ...	...	...	7	—	—	1	—	8
<i>Gynaecological.</i>								
Menstrual Disorders, ...			19	5	2	3	—	29
Uterine Displacements,			2	1	—	—	—	3
Sterility, ...	...	...	7	2	1	2	—	12
Cervical Tears,		...	2	1	—	—	—	3
Leucorrhoea, ...	...	...	—	—	—	1	—	1
Others, ...	...	...	29	13	3	9	3	57
No. of First Visits,	...		67	25	6	19	5	122
Total No. of Visits,	...		69	35	6	19	6	135

## CONTRACEPTIVE CLINIC.

*First Visits.*

Cardiac Disease, ... ..	5
General Dbility with Anaemia, ... ..	8
Pulmonary Tuberculosis, ... ..	3
Chronic Nephritis, ... ..	1
	—
	17

*Revisits, ... ..* 33

Total No. of Visits, ... .. 50

Induction  
of Abortion.

*Operations performed.*

General debility with marked loss of weight, ... ..	1
Pulmonary Tuberculosis, ... ..	1

On the first Sunday of September, 1936, religious services were commenced at the Institution for the staff only. These services have been well attended during the year. The undernoted clergymen and laymen have given their services :—

Rev. A. Watt.	Rev. Wm. Hamilton.
Rev. F. S. Watson.	Rev. R. G. Paterson.
Rev. A. Fletcher.	Rev. W. Gillon.
Mr. J. T. Smith.	Rev. W. M'Menemy.
Rev. A. D. Law.	Rev. J. M'Kenzie.
Rev. J. Blair.	Rev. K. M'Leod.
Rev. M. S. Dickson.	Rev. A. G. Taylor.
Rev. Chalmers Grant.	Rev. J. B. Wilson.
Rev. A. Dale.	Rev. W. Gilmour.
Rev. J. Meichie.	Rev. F. M. Murray.
Rev. J. Murray.	Mr. Greig.

It is with deep regret that we have to record the death of the Rev. K. M'Leod.

#### NEW BUILDINGS AND EQUIPMENT.

During the year 1937 the following additions have been made :—

- 1 Dental Chair.
- 1 M'Kesson's Apparatus for the giving of Nitrous Oxide.
- 1 New Austin-20 Ambulance.
- 1 Humber Snipe—a high speed car for the emergency services.
- Extension to the Garage—accommodation for 4 cars.
- Extra pantry accommodation and hot plate for Nurses' Home.

The following equipment has been granted by the Committee :—

- 1 Boyle's Nitrous Oxide Apparatus for emergency outdoor treatment.
- 1 Electric food trolley.
- 1 Hobart's Potato Peeler.

The last three items are now being installed.



## SUMMARY OF FOUR YEARS' ADMISSIONS.

During the past four years, 7,860 adults have been admitted to this Institution for treatment.—5,603 for confinement, 1,315 for ante-natal treatment, 800 abortions and 142 gynaecological cases.

It is a condition of the service that obstetric cases whose husband or guardian is a ratepayer in the Local Authority's area are never refused admission unless the accommodation is fully occupied. Further, cases of pregnancy with intercurrent disease, if resident within the Local Authority's area, as well as cases of abortion with anything left in the uterus, with or without elevation of temperature, are also admitted.

In reviewing the results of treatment, 39 cases died, while 6 other cases died after removal to the Isolation Hospital. It is a noteworthy fact that in one year alone three abortions were admitted with general peritonitis; all underwent abdominal section, and all died of general peritonitis. The number of deaths then totalled 45, giving a gross maternal death rate on all admissions of 5·7 per thousand, or of 8·5 per thousand based on live births.

A disturbing feature is that from 1934 the number of abortions admitted has increased from 168 to well over 200, while cases requiring ante-natal treatment have dropped from 347 to 300; but complicated cases of confinement remain at a uniform level, and during the year 1937 the number of confinements increased by about 6 per cent., while the remarkably low mortality of mothers of 1·4 per thousand is difficult to explain, and may be one of those good spells through which one passes and which one finds to be the case from time to time.

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 REPORT BY THE DENTAL SURGEON.
 

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A. R. MACFARLANE, L.D.S., D.D.S.

In the fight against puerperal sepsis it is well known that the absorption into the system of septic material from any source (*e.g.*, septic teeth) ought to be removed at the earliest possible moment.

Up till a few years ago, perhaps the least satisfactory service under the Maternity and Child Welfare schemes was the dental treatment of expectant and nursing mothers, probably due to the many difficulties to be overcome. From the patient's point of

view, firstly: the old fallacy that expectant mothers should not have teeth removed because of supposed attendant dangers to mother and child about to be born. Secondly: the great fear of the dental surgery. The first, with a little patience, tact and careful explanation to the mother of the dangers of retaining septic teeth during parturition and of the great benefits to be derived from their removal soon overcame the difficulty. The second was overcome by the use of a general anaesthetic, viz., continuous gas. In many instances the patients now present themselves and ask for treatment.

Every opportunity is taken to talk on oral hygiene and encouragement given by scaling and cleaning of the teeth.

The figures in the table rather than words show the amount of work done:—

CARRIED OUT AT BELLSHILL MATERNITY HOSPITAL—*Clinic.*

*Ante-natal Clinic.*

No. of patients treated, ... ..	146	Teeth
No. of Scaling and Gum Treatment, ... ..	10	Removed
		1,053

Special Cases—

Impactions, ... ..	2
Anaemics, ... ..	4
Bleeders, ... ..	4
Hospital, ... ..	2

*Child Welfare Centre.*

No. of Adult Patients, ... ..	550	7,284
No. of Children Patients, ... ..	2	
Scaling and Gum Treatment, ... ..	8	

Special Cases—

Blind, ... ..	1
Bleeders, ... ..	4
Anaemics, ... ..	2
Refused Treatment, ... ..	6
Failed to return, ... ..	1

## CALDERBANK HOUSE, BAILLIESTON.

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*Physician-Superintendent*—THOMAS M. HUNTER, M.D., D.P.H.

*Visiting Otologist*—JAMES ADAM, M.D., F.R.F.P.S.(G.).

*Sister-in-Charge*—Miss J. W. MAXWELL.

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### Administration.

ACCOMMODATION consists of 14 adult beds (2 for isolation), 33 children's cots, and 12 treasure cots.

STAFF.—The full nursing staff consists of sister-in-charge, 1 sister, 3 staff nurses, and 10 probationers; the domestic staff of 1 cook, 1 laundry maid, and 9 maids; and the outdoor staff of 1 gardener-boilerman, 1 assistant gardener-boilerman, and 1 apprentice gardener.

During the year the staff lost through illness 173 working days.

Owing to the difficulty in obtaining nurses, staff days lost between resignations and appointments amounted to 82 days.

BUILDINGS AND GROUNDS.—Two additional double-bedded cubicles were added to the quarters of the domestic staff in the early months of the year. These have proved of great benefit and have enabled us to establish more staff and allow a working week of less hours.

In the spring a start was made on the extension to incorporate a slunge, bathroom, sunlight room, and out-patient department. The building has reached an advanced stage, and it is hoped to be able to utilise these departments at an early date.

During the year a large amount of indoor painting was completed.

The greenhouse accommodation is at present being reconditioned.

In the summer a large electric cooker was substituted for the old range in the kitchen, and this necessitated fairly extensive alterations.

At various periods throughout the year trouble was experienced with the supply of water owing to the age of the original piping.

## ADMISSIONS AND DISCHARGES.—

	Adults.	Children (1-5 years).	Infants (Under 1 year).	Total.
In residence, 31/12/36, ... ..	8	8	18	34
Admitted during 1937, ... ..	115	176	162	453
Discharged during 1937, ... ..	118	172	150	440
Died during 1937, ... ..	1	1	15	17
In residence, 31/12/37, ... ..	4	11	15	30
Number of patient days, ... ..	1,977	2,971	6,372	11,320
Number of patients discharged, ...	119	173	165	457
Average duration of residence (days), ... ..	16·6	17·2	38·6	24·8

## NUMBER OF BEDS OCCUPIED.—

Average during the year, ...	5·4	8·1	17·5	31
Highest number in residence, ...	12	16	27	49
Lowest number in residence, ...	—	2	8	12

## OUT-PATIENTS.—

Total number of persons seen O.P. Department, ... 22

Total number of attendances at O.P. Department, 315

CHILD WELFARE CENTRES AND INSTITUTIONS FROM WHICH  
ADMISSIONS WERE ARRANGED.

	Mothers.	Children.	Infants.	Total.
Airdrie, ... ..	11	5	6	22
Baillieston, ... ..	6	10	6	22
Bellshill, ... ..	6	8	9	23
Bishopbriggs, ... ..	5	6	2	13
Blantyre, ... ..	3	1	16	20
Cadzow, ... ..	—	2	2	4
Cambuslang, ... ..	8	8	17	33
Carluke, ... ..	—	—	—	—
Chapelhall, ... ..	2	1	1	4
Chryston, ... ..	7	4	9	20
Coalburn, ... ..	1	—	—	1
Douglas Water, ... ..	—	—	—	—
Lanark, ... ..	2	—	1	3
Larkhall, ... ..	6	2	19	27
Newarthill, ... ..	3	3	9	14
Newmains, ... ..	4	—	15	19
New Stevenston, ... ..	5	1	7	13
Shotts, ... ..	2	2	10	14
Strathaven, ... ..	1	1	—	2
Tannochside, ... ..	6	2	8	16
Uddingston, ... ..	6	12	11	29
	84	68	147	299

			Mothers.	Children.	Infants.	Total.
Ear, Nose and Throat Clinic, ...			1	93	—	94
Bellshill Hospital, ...	...	...	29	—	8	37
Dental Clinic, ...	...	...	—	13	—	13
Motherwell Hospital, ...	...	...	1	—	3	4
Longriggend Sanatorium, ...			—	2	1	3
Public Health Staff, ...	...	...	—	—	2	2
Beckford Lodge, ...	...	...	—	—	1	1
Total, ...	...	...	115	176	162	453

## CONDITIONS TREATED.—

*Adults—*

## Ante-Natal :

Anaemia and Debility, ...	...	23
Toxaemia of Pregnancy, ...	...	4
Cardiac Disease, ...	...	1
Respiratory, ...	...	1
Varicose Veins, ...	...	1

Additional conditions in above cases :—Abscess of foot, 1 ; mastitis, 1 ; varicose veins, 1 ; ante-partum haemorrhage, 1 ; epileptic fit, 1.

One case was confined in Calderbank and immediately transferred to Bellshill Hospital.

## Post-Natal :

Anaemia and Debility, ...	...	53
Post Abortion, ...	...	5
With Infant, ...	...	3
Respiratory, ...	...	1
Albuminuria, ...	...	1
Varicose Veins, Phlebitis, ...	...	1
Mastitis, ...	...	1

Additional conditions in above cases :—Cardiac disease, 2 ; chronic bronchitis, 1 ; varicose veins, 1 ; leg abscess, 1 ; mastitis, 1 ; pernicious anaemia, 1.

## Others :

Anaemia and Debility,	...	...	12
Respiratory, ...	...	...	1
Phlebitis, ...	...	...	1
Pernicious Anaemia,	...	...	1
Ear, Nose and Throat,	...	...	1
Curettage, ...	...	...	1

Additional conditions in above cases :—Cardiac disease 1 ; varicose veins, 1 ; threatened abortion, 1.

*Children—*

Ear, Nose and Throat,	97	With Mother, ...	6
Debility, ...	23	Respiratory, ...	1
Rickets, ...	15	Glands, ...	1
Dental, ...	14	? T.B. Abdomen, ...	1
Gastro-Intestinal,	5	Otorrhoea, ...	4
Skin, ...	4	Worms, ...	2

Additional conditions in above cases :—Otorrhoea, 4 ; dental, 3 ; ear, nose and throat, 2 ; prepuce, 1 ; mentally subnormal, 1 ; cardiac disease, 1 ; post scarlet fever, 1 ; respiratory, 1 ; rickets, 1.

*Infants—*

With Mother, ...	45	Prematurity, ...	4
Debility, ...	40	Home Circumstances,	7
Gastro Enteritis, ...	23	Otorrhoea, ...	2
Marasmus, ...	12	Harelip, ...	3
Prepuce, ...	12	Spina Bifida, ...	1
Phimosis, ...	2	Rickets, ...	1
Skin, ...	7	Fits,...	1
Respiratory, ...	5		

Additional conditions in above cases :—Prepuce, 8 ; skin, 7 ; enteritis, 5 ; respiratory, 5 ; otorrhoea, 3 ; debility, 2 ; marasmus, 1 ; phimosis, 1 ; prematurity, 1 ; pyloric stenosis, 1 ; pyelitis, 1 ; jaundice, 1 ; cardiac disease, 1.



## RESULTS.—

*Discharged—*

	Adults.	Children.	Infants.	Total.
Well, ... ..	91	160	132	383
Improved, ... ..	13	5	7	25
I.S.Q., ... ..	3	5	6	14
Died, ... ..	1	1	15	17

*Transferred—*

Bellshill, ... ..	10	—	—	10
Beckford Lodge, ... ..	1	—	—	1
Motherwell, ... ..	—	2	1	3
R.H.S.C., ... ..	—	—	4	4

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119	173	165	457
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Went home against advice, ... 16

DEATHS.—The causes were :—Gastro-enteritis, 7 ; marasmus, 5 ; bronchial pneumonia, 2 ; cardiac (adult), 1 ; pyelitis, 1 ; prematurity, 1.

During the year three cases were transferred to the County Hospital, Motherwell—2 with scarlet fever and 1 with eye disease.

EAR, NOSE AND THROAT.—The following conditions were treated in theatre :—

Tonsils and adenoids, ... ..	50
Adenoids, ... ..	43
Otorrhoea, ... ..	6
Nasal Polyp., ... ..	1
Nasal Obstruction, ... ..	1
Cyst and Adenoids, ... ..	1
Tonsilitis, ... ..	1

In operative cases the bleeding time was estimated :—

Time in minutes, ...	1½	2	2½	3	3½	4	4
Number of Cases, ...	16	26	10	17	10	—	2

One case only during the year required circumcision.

Dental work involved five visits by the dentist. Altogether there were 22 cases—the total number of teeth extracted being 186.

## AGE ON ADMISSION.

	Months.				Years.					Years.				
Age, ...	—3	—6	—9	—12	—2	—3	—4	—5	—20	—25	—30	—35	—40	—45 45+
Number,	68	52	29	13	37	43	46	50	7	19	16	34	25	13 1

## ARTIFICIAL SUNLIGHT TREATMENT.

*Outdoor Patients—*

	Number.				Exposures.				Time.			
Adults, ...	...	...	9	185	43	hrs.	8	minutes.				
Children, ...	...	...	11	128	25	„	36	„				
Infants, ...	...	...	2	2			4	„				
Total,	...	...	22	315	68	hrs.	48	minutes.				

## Conditions Treated :—

			Adults.		Children.		Infants.	
Tuberculosis, ...	...	...	4	7	1			
Lupus, ...	...	...	4	—	—			
Adenoma, ...	...	...	1	—	—			
Rickets, ...	...	...	—	2	1			
Skin, ...	...	...	—	1	—			
Debility, ...	...	...	—	1	—			

*Indoor Patients—*

	Number.				Exposure.				Time.			
Adults, ...	...	...	1	6	30	hrs.	30	minutes.				
Children, ...	...	...	28	328	40	hrs.	30	„				
Infants, ...	...	...	15	163	19	„	4	„				
Total,	...	...	44	497	60	hrs.	4	minutes.				

## CONDITIONS TREATED.—

Debility, ...	...	16	Adenoma, ...	...	1
Marasmus, ...	...	3	Persistent Sickness, ...	...	4
Otorrhoea, ...	...	1	Skin, ...	...	2
Rickets, ...	...	13	T.B. Abdomen, ...	...	1
Respiratory, ...	...	2	Adenitis, ...	...	1

## COUNTY HOSPITAL, LANARK.

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*Physician-Superintendent—*

DOUGLAS BROWN, M.B., Ch.B., D.P.H.

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*Sister-in-Charge—Miss KEIR.*

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ACCOMMODATION.—Consists of four wards, two wards for mothers with 16 beds and two wards for children with 20 cots, a total of 36 beds.

The waiting list for admission has not been so congested as in former years and on two occasions during the year we were able to overtake the waiting list.

STAFF.—The staff consists of charge sister, 3 staff nurses, 4 probationers, 1 cook, 6 maids, and 1 gardener. There is not sufficient accommodation for all members of the staff, and the cook, 3 maids, and the gardener live out.

BUILDINGS AND GROUNDS.—During the year the installation for heating the wards with hot water radiators was completed and is proving very satisfactory.

Triplex grates have been provided for both ward kitchens in place of the old-fashioned ranges, and supplies of hot water are more readily obtained, and has resulted in a considerable saving of coal.

During December the wards were all repainted and the floors were resurfaced.

The grounds continue to be kept in good general condition, the greater part of which produces vegetables and small fruit for hospital use.

During the year the roadway from the main entrance to the back of the hospital and an area between the laundry and the back of the hospital was laid with tarmacadam.

## ADMISSIONS AND DISCHARGES.

In Residence, 1/1/37.	Admitted during Year.	Discharged during Year.	Died during Year.	In Residence 31/12/37.
12	472	474	1	9

The admissions show a decrease of 33 compared to those for 1936.

Causes which affected admissions during the year were the heavy snowfall in the early months, followed by the 'bus strike. Again, when the central heating was being installed in the wards and later during repainting, each ward had to be kept closed in turn.

Of the 475 patients discharged or died, 467 were from County areas and 8 from the Burgh of Lanark.

The following is a list of parishes where the patient resided and the number of patients from each parish :—

Avondale, ...	...	...	1	Hamilton, ...	...	12
Blantyre, ...	...	...	75	Lanark, ...	...	3
Bothwell, ...	...	...	133	Lesmahagow, ...	...	16
Cadder, ...	...	...	20	New Monkland, ...	...	15
Cambuslang, ...	...	...	31	Old Monkland, ...	...	17
Cambusnethan, ...	...	...	26	Pettinain, ...	...	1
Carluke, ...	...	...	16	Rutherglen, ...	...	1
Carmichael, ...	...	...	3	Shotts, ...	...	43
Carnwath, ...	...	...	3	Stonehouse, ...	...	5
Dalserf, ...	...	...	45	Burgh of Lanark, ...	...	8
Glasgow, ...	...	...	1	Total, ...	...	475

AGES OF PATIENTS.—The ages of patients discharged were as follows :—

*Children—*

Months.		Years.		Total.
—6	6-12	1-2	2-5	
125	34	33	15	207

*Mothers—*

Years.						
—20	—25	—30	—35	—40	Over 40.	Total.
18	58	74	45	48	25	268

NATURE OF ADMISSIONS.—The conditions necessitating admission were :—

*Children—*

Admitted with mother,	142	Skin disease, ... ..	13
Mother in Hospital, ...	3	Intestinal Worms, ...	1
Malnutrition, ... ..	12	Congenital Heart, ...	2
Rickets, ... ..	8	Prematurity, ... ..	4
Gastro Intestinal, ...	2	Others, ... ..	6
Respiratory Disease, ...	8	Total, ... ..	207
Feeding errors, ... ..	6		

*Mothers—*

Post-Natal.				Ante-Natal.			
Debility, ...	...	...	112	Debility, ...	...	...	4
Post Abortion, ...	...	...	11	Respiratory, ...	...	...	2
Respiratory, ...	...	...	6	Grave's Disease, ...	...	...	1
Cardiac, ...	...	...	6	Varicose Veins and	...	...	
Mastitis, ...	...	...	4	Haemorrhoids, ...	...	...	1
Varicose Veins and	...	...			...	...	8
Haemorrhoids, ...	...	...	10				
Leucorrhoea, ...	...	...	8				
Gastro Intestinal, ...	...	...	8				
Dental, ...	...	...	8				
Others, ...	...	...	8				
			<hr/> 181				

Gynaecological.				Others.			
Disordered Menses,	...	5		Debility,	...	...	30
Prolapsis Uteri,	...	2		Gastro Intestinal,	...	...	3
Ovaritis, ...	...	2		Respiratory,	...	...	9
		—		Cardiac Disease,	...	...	4
		9		Dental, ...	...	...	5
		==		Grave's Disease,	...	...	1
				Menopause,	...	...	3
				Others, ...	...	...	15
							—
							70
							==

Total, 268.

#### REVISED DIAGNOSIS :—

##### *Children—*

Two children admitted with mother proved to have respectively (1) scabies ; (2) mongolism.

One child admitted as rickets proved to be a mental defective, and one child admitted as respiratory proved to be a cerebro-spinal fever and was transferred to Roadmeetings Hospital.

##### *Mothers—*

Four debility (others) proved to be menopausal disturbances ; one bronchitis proved to be pulmonary tuberculosis and was transferred to Uppertown Sanatorium ; and one post-natal debility proved to be a suppurative mastitis.

It will be noted that the majority of mothers admitted were post-natal, *i.e.*, within a year of their confinement, and that they invariably had their babies with them.

These patients suffered from debility and invariably showed some degree of anaemia and sub-nutrition, the common complaints being headache, giddiness, and poor appetite.

Investigation shows that the type of diet common to most patients is at fault. They appear to drink large quantities of tea, and the



amount of carbohydrates consumed seems to be excessive, especially bread and potatoes. Little meat appears to be eaten, and is generally fried and the majority use margarine in place of butter.

After a few days' residence their appetites rapidly improve, and this is borne out by the almost invariably marked increase in weight and general well-being after 14 days' residence.

The main lines of treatment are rest, regular and varied diet, and the administration of tonics either by mouth or hypodermically and with as much time as possible spent in the open air.

TEETH.—Particular attention was paid to dental caries as a large proportion of these patients exhibit either pyorrhoea or dental caries or both with accompanying disturbance of digestion. During the year, of 268 mothers discharged 118 showed oral sepsis in one form or other. 61 patients had sound teeth and 5 of these perfect dentures. The following table gives a resume of conditions found :—

				Slight.	Moderate.	Severe.	Total.
Caries, ...	...	...	...	35	32	12	79
Pyorrhoea, ...	...	...	...	10	6	11	27
Both, ...	...	...	...	1	4	7	12
Good Teeth, ...	...	...	...	61			
No Teeth, ...	...	...	...	32			
Artificial Dentures, ...	...	...	...	43			
Not Noted, ...	...	...	...	14			

It has been noted that, within the last few years, there has been an increase of patients with no teeth, which points to this type of patient making more use of the facilities offered by the Child Welfare Scheme, and also an increase in those with artificial dentures.

The number of patients with "good teeth" is proportionately larger this year, but may be purely incidental.

Patients submit readily to dental treatment when they are allowed a few days in hospital to recover from the effects.

Sixty-five patients received dental treatment from qualified dentists, and the more severe cases were given gas anaesthesia, which also proves a great inducement to patients, who do not submit readily to treatment under local anaesthesia.

From experience, I can state that patients who have dental treatment under gas anaesthesia make a decidedly more rapid recovery from the effects than those who are given local anaesthetics. The sockets clean up in a day or two and there is little or no swelling.

This form of general convalescent treatment is of infinite value, marked by the pronounced increase in weight and general condition of the patients.

RESULTS OF TREATMENT.—319 patients were discharged well ; 107 much improved ; and 44 I.S.Q.

One patient was transferred to Uppertown Sanatorium ; 1 to Roadmeetings Hospital ; 1 to County Hospital, Motherwell ; and 1 was sent home with measles.

DEATHS.—A twin, aged 3 months, died of marasmus 4 days after admission.

INFECTIOUS DISEASE.—A child of 3 years was admitted on 24/4/37, developed the prodromal symptoms of measles on 1/5/37, and was sent home by ambulance the same day. The child developed typical measles at home on 3/5/37.

All contacts were followed up by the Nurse Health Visitor in the various districts, but none developed the disease and no further cases occurred in hospital.

On 4/2/37 a child of 5 weeks was admitted as suffering from respiratory disease and fortunately was isolated from the date of admission.

On 15/2/37 child began to show symptoms of meningitis, a lumbar puncture was done on 16/2/37, and as the spinal fluid was thick and turbid the child was transferred to Roadmeetings Hospital on 17/2/37. There were no child contacts and the entire ward and all bed-clothing was fumigated and cleaned.

## POOR LAW INSTITUTIONS.

### REPORT ON OMOA HOSPITAL, 1937.

Accommodation remains unchanged, consisting of 8 Male Wards and 5 Female Wards.

*Staff.*—Nursing Staff consists of Matron, 7 Staff Nurses, and 6 Probationers. Staff is assisted by Ward Maids.

	Men.	Women.	Boys.	Girls.	Total.
Number of Patients in Hospital at 31st December, 1936, ...	57	28	4	2	91
Number of Patients admitted during year ending 31st December, 1937, ... ..	185	47	15	12	259
	242	75	19	14	350
Number of Patients discharged during year ending 31st December, 1937, ... ..	181	43	14	10	248
Number of Patients in Hospital at 31st December, 1937, ...	61	32	5	4	102

Largest number in one day—109 on 14th January, 1937.

Smallest number in one day—74 on 7th August, 1937.

There were 67 deaths—44 males and 23 females.

Five cases were certified insane and removed to Hartwood Asylum—2 males and 3 females. There are 6 mental defectives, 3 males and 3 females. These have given no trouble, and some of them are usefully employed. The type of case during the year has been, as usual, of a chronic nature. Many of them are incontinent and helpless, and consequently require careful nursing. A number of cases are received from the General Hospitals, such as inoperable cases. These hospitals, naturally, with their large waiting list, cannot keep cases which require many months of nursing, and are in a hopeless condition. All types of cases are met with :—Pulmonary, cardiac, malignant and skin, etc. A considerable number of gastric cases are received. These require special lines of treatment such as dietary, and, of course, require more expenditure and treatment.

*Encephalitis Lethargica Wards (After Effects).—*There are two wards, male and female—7 males and 7 females. These cases are helpless and require constant nursing attention. Some of them cannot feed themselves. In these wards there was one death during the year.

*Epileptics.*—There are 8 epileptics, 6 males and 2 females. I have in previous Medical Reports expressed the view that these patients should not be in a General Hospital. During a seizure they naturally perturb the other patients, and, before and after a seizure, they are very often abnormal in their mental condition. They may become a danger to others.

*“Borderland” Cases.*—These cases are sent in probably to avoid stigma of Asylum. They give a great deal of trouble, and a number have had to be removed to Hartwood Asylum. A Mental Observation Ward outside an Asylum might prove very useful.

*Nursery and Cottage.*—There are at present 9 in the Nursery. There have been cases of diphtheria, scarlet fever and whooping cough. These were removed to the County Fever Hospital at Motherwell. There have also been cases of measles, chickenpox and pneumonia. Most of these cases were nursed in Omoa Hospital. The children are healthy and happy looking.

A Cottage has been acquired at the entrance to the House. This is for children, and there are at present 14 in residence. They attend the village school, and are under the charge of a qualified Nurse.

*Infirm Wards.*—There are two, male and female. These old people are very happy and appear to enjoy the privileges they receive in these wards. Many have expressed to me their gratitude.

*Venereal Cases.*—These are sent to the County Hospital, Motherwell.

*Maternity Cases.*—There have been no Maternity Cases during the year.

*Eye Cases.*—These are sent to the Eye Infirmary in Glasgow when necessary.

*Skin Diseases and Offensive Cases.*—Arrangements have now been made to send these cases to Motherwell County Hospital. Those who are received here are carefully isolated.

*Cancer Cases.*—Superficial cases, such as rodent ulcer and affection of the tongue, are sent to the Radium Centre at the Glasgow Western Infirmary. Some of these cases have done very well. The other cases of cancer received in Omoa Hospital are usually incurable cases from General Hospitals, such as colostomy and supra pubic cystotomy.

*Surgical Cases.*—These are sent to the Glasgow General Hospitals.

A dentist visits the Hospital when required.

*X-ray Cases.*—These are sent to Motherwell County Hospital or to the General Hospitals in Glasgow.

Tubercular cases are notified to the County, and when a bed is vacant are sent to the Sanatoria.

The nursing arrangements are satisfactory, and the nursing staff at present is adequate. Comfortable accommodation is provided for the nurses. There is a sick ward.

The general wards are well kept, clean, bright and well equipped with medical appliances. The bathing of the sick is carefully attended to. Ventilation and heating of the wards is satisfactory.

*House.*—The wards are clean and carefully looked after. Any inmate can consult the Medical Officer on his daily visit. Cases requiring dietary are given a special diet. Classifications as regards work are submitted to the Medical Officer.

GEO. HUGH LOGAN, M.B., Ch.B.,  
*Medical Officer.*

**REPORT ON CROSSLAW HOME, LANARK,****For the Year 1937.**

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I beg to submit my report on the above Home for the year 1937.

The accommodation remains unchanged, and has proved ample for all patients admitted during the year.

Each case brought in is medically inspected, and, if fevered, or seriously ill, attended to daily. Ordinary cases are seen twice or three times weekly.

Food is ample, appetising, and well cooked. The inmates seem to enjoy it, and, at any rate, I have heard of no one complaining about it.

Nursing arrangements are quite satisfactory, the staff consisting of Governor-Matron and Assistant-Matron, both well qualified nurses, the latter being also a certificated midwife. They have the help of ward maids, and others who are interested in the work. The accommodation for the Nursing Staff is quite satisfactory.

Medicines and medical appliances are plentiful, and can be added to when necessary.

There is no water in the wards, but in adjacent compartments water is in abundance, both hot and cold. Also, in these compartments, there are baths, etc., so that all patients, on their arrival, have a warm bath, if in a fit condition for same. If not, they are hand-sponged.

Both wards and lobbies are heated by means of hot water pipes in the cold season, so that patients are kept very comfortable.

The wards are well ventilated by means of side ventilators and windows, the latter being slightly raised at the bottom, and wood fitted in to prevent draughts.

The sanitary arrangements are in very good order, and the wards are well kept and clean.

A special hut is provided in the grounds for any skin diseases that might be admitted, such as itch, etc.



Any cases of tubercular disease admitted, and sputum proved positive, are reported to the County M.O.H. and then removed to the sanatorium. Infectious diseases, such as diphtheria, scarlet fever, etc., are reported, and then removed to the various fever hospitals. The same applies to venereal cases. Cancer cases are sent to Glasgow Cancer Hospital.

Obstetric cases are sent to Bellshill Maternity Hospital.

Cases requiring major operations are sent to Glasgow, but any small operations are either done in our local hospitals or in the Home.

There have been a few heavy cases admitted this year, that is, cases requiring constant attention, being bed-ridden, and in whom bed sores are apt to occur.

I would strongly recommend that a small verandah should be built out in connection with the wards, so that these cases could be taken out into the sunshine, during the summer months.

At the same time, something will have to be done so that patients could be removed in the event of fire taking place. At present, there is nothing but two narrow stairs by which patients could be removed.

Our cases are mostly old people who have no one to attend to them in their own homes, or where the accommodation for them was such that nursing arrangements could not be attended to properly. Hence we have a high mortality.

The following table shows Admissions, Discharges, etc., for the year 1937.

	Men.	Women.	Boys.	Girls.	Total.
In Sick Wards at 31/12/36,	8	4	—	—	12
Admitted during the year,	33	7	2	1	43
Total during the year, ...	41	11	2	1	55
Of whom cured, ...	7	1	1	—	9
Of whom relieved, ...	9	3	1	—	13
Of whom died, ...	13	1	—	—	14
Of whom otherwise removed, ...	6	1	—	—	7
Remaining at 31/12/37, ...	6	5	—	1	12

THOS. W. BANKS, M.B., C.M.,  
*Medical Officer.*

Crosslaw Home, Lanark.

## REPORT OF THE COUNTY VETERINARY INSPECTOR.

To—

**The Department of Health for Scotland.**

**The County Council of the County of Lanark.**

**The Town Council of the Burgh of Biggar.**

**The Town Council of the Burgh of Lanark.**

GENTLEMEN,

I have the honour to submit herewith the Twelfth Annual Report of the work done by the Veterinary Department under the Milk and Dairies (Scotland) Act, 1914, for the year 1937. As usual, this report is compiled in accordance with instructions issued by the Department of Health for Scotland.

### ANY MATTER OF GENERAL INTEREST.

Perhaps the most outstanding matter of interest during 1937 was the passing of the Agriculture Act, Part IV of which makes provision for a concerted attack against certain diseases in cattle and the transfer of most of the Veterinary duties of Local Authorities to the Ministry of Agriculture and Fisheries. At the moment it is difficult to envisage what far reaching effects such a revolutionary change will have, but if, as a result, some of the common ailments of dairy cows can be eradicated or reduced to controllable proportions, undoubtedly both the farming community and the general public will benefit materially. As matters stand, the average life of the cow is short after the commencement of milk production, and if this period can be doubled, an aim which would not be too ambitious, it will be quite easily understood how dairy farming and cattle-breeding generally will become more remunerative. At present the wastage in dairy herds due to disease is appalling, but it is also true to say that much of it could be avoided by the exercise of a little care on the part of the farmer. The success of any schemes, however, will depend much on the active co-operation of stock-owners, but the ignorance, carelessness, apathy and ill-founded criticisms displayed at present can do much to hamper progress.

In connection with the Tuberculosis (Attested Herds) Scheme (Scotland), much more progress has been made during the year under review. At 31st December, 1937, there were 65 Attested Herds in the County, 56 of which also hold licences under the Milk (Special Designations) Order (Scotland). It is surprising, however, that up to date there are only 8 Supervised Herds, 2 of which are Graded,

and, considering the facilities granted in such herds for the refund of expenses in connection with tuberculin testing, this figure is surprisingly low. It would appear, however, that one cause is the failure of many dairy farmers to realise fully the advantages to be gained from the scheme. In addition, it is also true to say that, while a large number of owners have of late submitted their herds to the tuberculin test, the percentage of reactors disclosed was such that no further action could be taken, short of disposing of the whole stock. Further, owners who are prepared, even in badly infected herds, to make an attempt to eradicate tuberculosis from their stock are often debarred from doing so owing to lack of suitable premises for isolation purposes. On these farms there are often two byres where reactors to the tuberculin test could be segregated from non-reactors, but, unfortunately, usually only one of these complies with the dairy by-laws, and, consequently, it is only permissible to keep the milking cows confined to this particular byre. In many cases these unregistered byres, although not complying with the regulations, are quite good, and it would be a decided advantage where owners are making a genuine attempt to free their herds of tuberculosis, if some form of temporary registration could be granted for such byres for a certain specified period. As matters stand at the moment, it would appear that, in some cases at least, these by-laws are to a certain extent defeating their own ends, since, although they make provision for more healthy surroundings for the cows, they, at times, hamper progress being made in the eradication of this disease. The position seems even more anomalous when it is realised that there are still premises from which milk is produced day and daily, and which are in a much worse state than the unregistered byres referred to above.

Of late years the results of tuberculin testing in ordinary herds in the County have shown the fallacy of a practice which pertains on many farms and which we have always condemned. I refer to the habit of reserving the dairy byre for cows in milk only, and of housing the dry cows in other buildings with young stock of varying ages. The constant interchange of cows from one byre to another during the winter months as they go dry or approach the calving leads to infection amongst the young stock to such a degree that in quite a few cases the percentage of reactors is almost as high amongst these as it is amongst the dairy cows. Undoubtedly, these young cattle would have contracted tuberculosis when they ultimately entered the dairy byre, but, as matters stand, they start life with disease one to two years earlier than they might otherwise do, a state of affairs

which, apart from not being in the best interests of public health, must have an adverse reflection on the farmer's returns at the end of the year. By adopting the above procedure the maximum amount of milk is produced, but it is questionable if the increased production gained is adequate compensation for the damage done amongst the young stock.

It was pointed out in my report for last year that, under the Attested Herds Scheme (Scotland), the nominated Veterinary Surgeon of the Local Authority now carries out the tuberculin testing in Attested Graded Herds after the certificate of attestation has been granted. Unfortunately, owing to lack of staff, we were compelled to ask to be relieved of this duty. For the same reason we have not had the time we would have wished to discuss with many owners of herds the various positions regarding Attested, Graded and Supervised Herds, or to do much propaganda work to encourage the establishment of tubercle-free herds. The Veterinary Officer can do much valuable work in this connection, but discussions on the subject are time consuming and, owing to pressure of work in other directions, we could do no more than give the matter scant attention.

#### MILKING MACHINES.

Although reference has been made in previous reports to the increase in the number of milking machines which had been installed, the number in use during 1937 is greater than ever, and there is every reason to believe that, because of their efficiency and the difficulty experienced in obtaining suitable labour on the dairy farm, their use will become even more general.

#### CONGENITAL TUBERCULOSIS.

During 1937 six reports were received that calves killed in various abattoirs had been found affected with congenital tuberculosis on examination, four in the County and two in Burghs. These figures show a very considerable reduction as compared with 1936, when twenty-one such cases were reported. This difference is difficult to explain in view of the fact that there is no material change in the number of calves slaughtered in the area and that the standard of inspection at the various abattoirs remains the same. As a result of our investigations, three cows were dealt with under the Tuberculosis Order.

#### ADMINISTRATIVE DIFFICULTIES.

During the year no administrative difficulties were met with under the Milk and Dairies (Scotland) Act.

## 1. CONDITION AND CLEANLINESS OF COWS.

In general the condition of the dairy cows in the County remains satisfactory and their cleanliness would appear to be up to the usual standard. One cannot help commenting, however, even at the risk of repeating what has often been said in previous reports, that most of the trouble regarding cleanliness arises from faulty manure channels, and in this connection it is annoying to come across new byres where these channels are little better than the old ones. More stringent regulations should be laid down regarding these, even if an increase in their size is made at the expense of the passage behind the cows. There are extremely few channels in the County that are at all adequate, and after the byre is built it is very difficult to make any alterations. In fact, one wonders, in the light of the experience gained since the dairy by-laws came into force, if they do not now need amending in certain other directions as far as they relate to byre construction.

### (a) NATURE OF THE FODDER AND DIET AS AFFECTING THE QUALITY OF THE MILK.

In no case during the year was there any case brought to our notice where the feeding stuffs had affected the quality of the milk.

### (b) NUMBER OF DISEASED COWS FOUND—EXCLUDING TUBERCULOSIS.

During routine herd examination the usual diseases affecting dairy cows were encountered, and, where it was thought fit, the produce of any particular cow was excluded from sale for human consumption

### (c) DISPOSAL OF MILK FROM DISEASED COWS.

As in previous years, reliance was chiefly placed on the owner not to sell for human consumption any milk from a cow certified to be suffering from a disease liable to infect or contaminate the milk. The Sanitary Inspectors, however, continue to exercise a certain amount of supervision in cases where they have been notified that such a cow exists.

## 2. INSPECTION OF CATTLE.

During the year we were unable to complete three examinations of all the dairy herds in the County. As in previous years, two temporary Veterinary Inspectors were appointed for this purpose, but on various occasions it was necessary to call on one or both for other duties.

Herds examined, ...	... 3,694	Average per examination, 1,231
Cows examined, ...	... 89,763	Average per examination, 29,921



*Annual frequency of examination.*

Registered dairies, ... ..	2 $\frac{1}{2}$
Exempted premises, ... ..	1

## 3. BOVINE TUBERCULOSIS.

## (a) NUMBER OF COWS FOUND TUBERCULOUS ON CLINICAL EXAMINATION OF HERDS.

Table III shows the number of cases dealt with under the Tuberculosis Order and the classification in accordance with that Order of the various forms of disease. The Table also shows the number of cases found during routine herd examination. It will be noted that the number of cases of udder tuberculosis detected still remains high (89.9 per cent.). Undoubtedly, in many of these cases, it could not be assumed that the owners were aware of the existence of the condition and many only came to light whilst conducting investigations subsequent on the receipt of information that certain supplies were infected with tubercle bacilli. Nevertheless, some owners had failed to carry out their obligations under the Tuberculosis Order, and, as a result, proceedings were taken against six farmers for failure to comply with the requirements of the Order.

During the year a total of 401 positive cases was dealt with, this figure showing an increase of 102 as compared with 1936. The number of cases reported by owners and private practitioners is approximately the same as those for the previous year, but 92 more cases were detected by the Veterinary Department. In addition, 114 cases reported by owners and private practitioners proved to be not amenable to the Order on examination.

## (b) NUMBER OF COWS FOUND TUBERCULOUS AFTER TUBERCULIN TEST.

In only five cases during the year was the tuberculin test applied to assist in the diagnosis whilst investigating cases under the Tuberculosis Order. This figure has fallen from 63 since 1934.

## (c) TOTAL NUMBER OF COWS TO WHICH THE TUBERCULIN TEST WAS APPLIED UNDER SECTION 22 OF THE MILK AND DAIRIES (SCOTLAND) ACT, 1914.

None.



(d) NUMBER OF DAIRIES HOLDING LICENCES IN RESPECT OF  
TUBERCLE-FREE HERDS.

CERTIFIED.

Name and Address.	No. of years licensed.	Average number of Herd.	Average number of Cows.	Estimated number of gallons of milk produced per annum.
J. G. Gilchrist, Auchtygemmell, Lesmahagow.	12	74	42	32,668 gallons.
Wm. Fleming, Auldton, Ashgill.	11	—	46	30,478 „
James Hodge, Brownhill, Carnwath.	14½	48	19	13,414 „
Donald Ian Brown, Bushelhead, Carluke.	8	—	19	11,315 „
James Fleming, Bogside, Ashgill, Dalserf.	9 months.	32	25	22,265 „
Thos. Pate, Jr., South Draffan, Kirkmuirhill.	9	—	47	40,333 „
John Bannatyne, Drumalbin, Thankerton.	6	—	43	24,090 „
Robert Lohoar, Greenlees, Cambuslang.	5	—	49	36,135 „
County Council of the County of Lanark, Hairmyres Colony, East Kilbride.	15	64	30	25,550 „
Lanarkshire Mental Hospitals Joint Committee, Home Farm, Hartwood.	9	126	74	62,050 „
J. & T. Blackwood, Hill of Kilncadzow, Carluke.	11	82	38	18,615 „
Robert Lohoar, Holmhill, Cambuslang.	2	—	21	16,425 „
John Hamilton, Low Mains, East Kilbride.	11	62	38	27,193 „
Thos. Fleming, Millburn, Larkhall.	5	63	42	24,455 „
Stewart Findlay, Springhill, Baillieston.	5	81	42	32,120 „
John Russell, Walston Mansion, Dunsyre.	13½	88	50	30,782 „
John G. Lohoar, Wellshot, Cambuslang.	6½	58	34	26,280 „
A. W. Montgomerie, Westburn, Cambuslang.	11	36	34	32,668 „
Thos. Renwick, Westertown, Strathaven.	3	—	23	11,498 „
				<u>518,334</u> „

## TUBERCULIN TESTED.

Name and Address.	No. of years licensed.	Average number of Herd.	Average number of Cows.	Estimated number of gallons of milk produced per annum.
James Elder, Ampherlaw, Carnwath.	3½	—	31	20,440 gallons.
John Struthers, Anston, Dunsyre.	12	—	39	29,383 „
Hugh C. Brown, Birkwood Mains, Lesmahagow.	12	55	30	21,414 „
Lindsay Steele, Blackhill, Crossford.	12	54	32	16,790 „
John Fairie, Low Blackwoodyards, Kirkmuirhill.	9	47	40	29,565 „
Corporation of the City of Glasgow, Brackenhirst, by Airdrie.	2	172	112	63,510 „
Matthew Bowie, Easter Balmuildy, Maryhill.	2	—	40	29,383 „
Scottish Land Development Co., Ltd., Brancumhall, East Kilbride.	1½	112	55	36,318 „
James Watt, Benthall, East Kilbride.	1	67	37	18,798 „
Andrew Lang, Baitlaw, Biggar.	1	81	38	18,798 „
Alex. Wilson, South Carnduff, Strathaven.	10½	56	28	19,954 „
Thos. Cadzow, Mid Coldstream, Carluke.	3	24	14	11,315 „
J. A. & W. Brown, Cormiston Towers, Biggar.	15	76	42	20,440 „
John Cadzow, Craighead, Carluke.	11	—	21	15,574 „
John Simpson & Son, Crofthead, Bishopbriggs.	3	—	16	7,665 „
Wm. M'Lachlan, East Crookedstone, Quarter.	9 months.	61	27	18,433 „
Thos. Wilson, Caldermill, Strathaven.	2 months.	—	27	14,965 „
John Howatson, Dalzell Home Farm, Motherwell.	15	—	56	33,763 „
Frank Lambie, Drumbuie, East Kilbride.	3	—	33	21,353 „
C. & J. Gilchrist, Low Drumclog, Strathaven.	7½	—	30	22,448 „
Wm. Steel & Son, Dumbraxhill Lesmahagow.	3½	—	33	24,090 „

TUBERCULIN TESTED—*Continued.*

Name and Address.	No. of years licensed.	Average number of Herd.	Average number of Cows.	Estimated number of gallons of milk produced per annum.
Robert Campbell, Drumpark, Bargeddie.	1 month.	14	11	11,315 gallons.
R. & T. Scott, Eastertown, Douglas Water.	7½	—	29	20,258 „
S. A. Ballantyne, Eastwood, Lesmahagow.	9	—	48	38,082 „
Corporation of the City of Glasgow, Gartloch Home Farm, Gartcosh.	9	186	99	71,540 „
Robert Reid, Greathill, Strathaven.	3	—	29	27,923 „
Alex. H. Stobo, South Garngour, Lesmahagow.	2	97	49	33,033 „
Jas. Young & Sons, Greenfield, Strathaven.	1½	38	31	22,813 „
Jas. Morton & Son, Greenhills, East Kilbride.	1 month.	37	29	14,965 „
Walter Adamson, Harleyholm, Thankerton.	11½	61	38	28,714 „
J. & H. Gibson, Hazeldean, Stonehouse.	3	—	35	21,170 „
John Speir, Ltd., Heatheryknowe, Bargeddie.	8	—	73	61,138 „
Jas. Tennant, Hillhouse, Sandilands.	1	71	26	15,330 „
G. & R. Struthers, South Halls, Strathaven.	9 months.	70	38	25,307 „
David Howie, Hillend, Crossford.	9 months.	—	38	31,390 „
Thos. Steele, Over Kypeside, Kirkmuirhill.	2½	57	29	21,353 „
Wm. Meikle, Kypewaterhead, Lesmahagow.	4	—	28	16,425 „
Jas. Scott, Lawriesmuir, Lesmahagow.	7	—	28	17,703 „
Gavin Cullen, Leadloch, Fauldhouse.	6	48	19	12,410 „
T. B. McGregor, Lesserlinn, Lanark.	14½	—	42	29,930 „
R. & W. Wallace, Linnhead, Sandilands.	12	56	33	19,163 „
Andrew Wilson, Lambhill, Strathaven.	1½	—	28	18,798 „
John Riddet, Leelaw, Lesmahagow.	1	64	29	27,375 „

TUBERCULIN TESTED—*Continued.*

Name and Address.	No. of years licensed.	Average number of Herd.	Average number of Cows.	Estimated number of gallons of milk produced per annum.
Alex. Thomson, Lonsdale, East Kilbride.	6 months.	15	5	3,103 gallons.
Hugh Barr, Muirfoot, Carstairs.	6	—	51	30,113 „
Thos. Scott, Netherhall, Sandilands.	8	—	28	25,733 „
*The Earl of Home, Newmains Home Farm, Douglas.	12	33	16	8,395 „
Archd. Weir, Netherfield, Coalburn.	2	32	17	10,950 „
James G. Kedar, Netherfield Dyke, Strathaven.	2	75	39	23,543 „
R. J. Gilliland, Overhouses, Darvel.	2	—	18	16,790 „
Wm. Lindsay, Robiesland, Lanark.	2	77	47	32,729 „
Francis Lambie, Roundhill, Strathaven.	2	63	34	18,798 „
John Kirkwood, Scorrieholm, Lesmahagow.	14	—	29	23,543 „
Thos. Stewart, Southfield, Kirkmuirhill.	12	125	49	37,352 „
Mrs. Jessie Murray, Stramolloch, Chapelton.	14½	30	15	10,950 „
Andrew Murdoch, Teaths, Lanark.	15	70	34	27,558 „
Jas. Neilson, Upper Throughburn, Lanark.	2	65	30	21,170 „
John Strachan, Udstonhead, Strathaven.	11½	—	50	36,500 „
James Young, Easter Whitecastle, Biggar.	5½	71	36	24,334 „
James Barr, Whiteshaw, Carlisle.	12	65	41	26,767 „
Thos. A. Ballantyne, Woods, Auchenheath.	12	59	27	19,345 „
George Elder, Wester Yardhouse, Carnwath.	6	—	19	11,133 „
				<u>1,489,340</u> „

\*The herd at this farm was sold in October.

At 31st December, 1937, there were 80 herds licensed to produce Certified or Tuberculin Tested Milk. This is an increase of 9 compared with 1936. As previously stated, 56 of these herds are also Attested, and the owners of those not Attested usually ask to have the tuberculin test applied to their herds every two months in order that they may participate in the Tuberculosis (Attested Herds) Scheme (Scotland) as soon as possible. This increased testing entails a very considerable amount of extra work for the Veterinary Department, especially when it is realised that, according to the old Order, these tests were only applied at six-monthly or yearly intervals as the case may be.

The increase in the number of Graded herds in the County still continues to be slow even in spite of the fact that most producers are guaranteed a bonus by the Milk Marketing Board. There is no doubt that this increase would be greater if the members of the Veterinary Department could spare the time for propaganda work in this connection, time which, if available, would be well spent. Many farmers are unaware of the exact requirements of the Milk (Special Designations) Order, and there is evidence to show that, in certain directions beyond the control of the Local Authority, they are purposely being kept in ignorance.

(e) NUMBER OF ANY OTHER DAIRIES KNOWN TO HAVE  
TUBERCLE-FREE HERDS.

In recent years the number of owners who have submitted their herds to the tuberculin test is greater than ever before, but it may be taken for granted that, in cases where owners have been successful in freeing their herds of tuberculosis, they have either applied for attestation or licences under the Milk (Special Designations) Order. As has already been stated, there were 80 licensed herds in the County at 31st December, 1937, 56 of which are Attested. In addition, there are 9 officially Attested Herds which are not Graded.

#### 4. MISCELLANEOUS.

(a) LIST OF DAIRIES HOLDING LICENCES FOR THE PRODUCTION  
OF STANDARD MILK.

Name and Address.	Average number of Cows.	Estimated number of gallons of milk produced per annum.
John Fleming, Bruntland Dairy, Wishaw.	33	20,319 gallons.
James Barrie, Mossplatt, Carstairs.	31	18,615 „
		<u>38,934</u> „

(b) NOTES ON ANY SAMPLES TAKEN FOR EXAMINATION IN TERMS  
OF SECTION 21 OF THE MILK AND DAIRIES (SCOTLAND) ACT, 1914.

See Table II.

During the year 59 notifications, representing 57 different farms, were received that bulk samples of milk had been found to contain tubercle bacilli. The sources of this information were as follows :—

City of Glasgow,	...	...	...	6
City of Edinburgh,	...	...	...	3
Burgh of Motherwell,	...	...	...	1
County Medical Officer of Health,	...	...	...	49

This figure shows a marked increase compared with the previous year, and is due to an arrangement made with the Medical Officer of Health whereby it was agreed that more bulk samples of milk should be taken for examination than previously, and it is interesting to note that, while the number found to contain tubercle bacilli has increased, the number of complaints received from Glasgow has fallen from 16 to 6 as compared with the figures for 1936. 770 bulk samples of milk were submitted to the laboratory for biological examination during the year, 50 of which proved positive, *i.e.*, 6·5 per cent. approximately. As these samples were taken at random all over the County, it may be taken that about 6·5 per cent. of milk reaching the public is infected with virulent bovine tubercle bacilli. If these infected supplies be mixed with milk from other farms at the various depots, this figure will even be higher, depending on the amount of mixing taking place.

As a result of our investigations subsequent on these reports, 63 cases were dealt with under the Tuberculosis Order, 44 being affected with tuberculosis of the udder. In 18 instances we were unable to detect any animal in the herd giving tuberculous milk. This latter figure would appear to be unnecessarily high, and while it was stated in the report for last year that there are many good reasons to explain such discrepancies, experience has tended to prove that much responsibility rests with those charged with the duty of collecting the bulk samples. It would almost seem essential that they should have some knowledge of bacteriology in order to appreciate fully the many



pitfalls. Owing to improved technique, however, much better results were obtained during the latter half of the year. Further, it is a decided advantage if the samples are collected on the farm instead of at creameries or from milk churns in the course of transit, a fact which is not surprising when the state of some of the milk churns is taken into consideration. These presumably become infected with tubercle bacilli and, owing to inadequate sterilisation, re-infect subsequent supplies which may not have come from the same source as the original infected sample. In spite of the difficulties, however, the results obtained would appear to fully justify the taking of bulk samples, more especially when it is realised that many of the cases dealt with were in the early stages of tuberculosis. It has always been my opinion that clinical examination of dairy herds for the detection of udder tuberculosis has grave limitations even when carried out by experienced clinicians, and that, to obtain the best results, such examinations should be combined with bulk sampling of milk, the latter procedure bringing to light many cases which have not reached the clinical stage. In this connection, it is worth noting that while, according to Table III, 98 cases of udder tuberculosis were detected during the year, 44 of these, or almost 50 per cent., were found when conducting investigations following on reports to the effect that certain supplies had been found infected. In only three cases was the offending cow detected during the course of routine herd examination and removed from the herd before the complaints were received.

Mention has been made in previous reports regarding the difficulty of routine herd examination during the summer months when the cows are at grass, and whilst these difficulties are not unsurmountable, it would seem a more feasible proposition at this period of the year to collect as many bulk samples of milk as possible for examination and to concentrate on the examination of those herds whose produce was found to contain tubercle bacilli. Any system of routine inspection necessitates the examination of many herds where no cases amenable to the Tuberculosis Order are found, and while it cannot be said that the time spent examining these herds is wasted, it could be spent to better advantage in examining herds which are known to be yielding tuberculous milk. Admittedly, such a suggestion does not give the opportunity for the detection of cases notifiable under the Order other than tuberculosis of the udder in herds which are not yielding tuberculous milk, but these forms of tuberculosis are not quite so important as udder cases from a public health point of view, and in any case are more easily recognised by the farmer himself.

The report which was received from the Burgh of Motherwell is of more than passing interest. This complaint referred to a Tuberculin Tested herd licensed under the Milk (Special Designations) Order. No reactors to the tuberculin test had been found in the herd during the two previous tests, nor had any animal been moved from the farm since the date on which the sample was taken. In view of the complaint and the fact that the next test was almost due, it was decided to apply a test at once. This was done and no reactors were disclosed, nor did a careful clinical examination of the cows' udders reveal any abnormality the least suggestive of tuberculosis. In view of these results, it was thought advisable to check the original finding by submitting another bulk sample of milk from the herd to a further biological examination. This again proved positive. The cows were re-examined clinically and samples taken from each animal. One of these showed the presence of acid-alcohol-fast organisms suggestive of tubercle bacilli, but, as no clinical evidence of tuberculosis could be found in the cow's udder and as two further milk samples and two tuberculin tests were equally negative, it was thought advisable to await the biological examination of the sample. In due course this also proved positive and the cow was slaughtered under the Tuberculosis Order, but before being killed was again submitted to three different tuberculin tests. These were again negative. A very careful examination of the carcase and organs failed to reveal any lesions of tuberculosis nor could any histological or biological evidence of this disease be detected in any of the glands or parts of the udder submitted for examination.

It is difficult to explain the findings in this investigation, and it is unfortunate that the organism recovered from the various guinea-pigs was not typed with a view to discovering whether the bacilli were of human or bovine origin. It is difficult to believe, however, that they were of a bovine strain in view of the findings and the circumstantial evidence, but it is equally difficult to conceive that they were of human origin in view of the consistent results and the fact that the issue was narrowed down to one particular cow. The question of avian infection did not arise.

We have previously had evidence which would suggest that there are organisms similar to tubercle bacilli capable of producing lesions in the guinea-pig indistinguishable from tuberculosis, and one wonders if the above experience is a repetition of former anomalous findings. The results of the tuberculin test would tend to support this view.

(c) A STATEMENT OF THE EXTENT TO WHICH SECTIONS 13 AND  
14 OF THE MILK AND DAIRIES (SCOTLAND) ACT ARE BEING  
COMPLIED WITH.

The produce of 26 cows was certified during the year as liable to infect or contaminate the milk and the usual precautions were taken.

No reports were received under Section 14 of the Act.

BURGHs OF BIGGAR AND LANARK.

In the Burgh of Lanark 3 herds, comprising 26 cows, were examined.

There are no dairy cows kept in the Burgh of Biggar.

I have again to record my appreciation of the very active co-operation of other members of the County staff, and, in particular, for the loyal support of the members of the Veterinary Department.

I am, Gentlemen,

Your obedient Servant,

JOHN WEIR,  
*County Veterinary Officer.*

TABLE I.

STATEMENT SHOWING THE NUMBER OF COWS FOUND TO HAVE  
ABNORMAL CONDITIONS OF THE UDDER.

Tuberculosis, ...	...	...	...	...	124
Atrophy, ...	...	...	...	...	4,520
Mammitis, ...	...	...	...	...	1,337
Induration, Non-Tuberculous,	...	...	...	...	1,628
Eruptions on Teats,	...	...	...	...	53

TABLE II.

STATEMENT SHOWING THE NUMBER OF MILK SAMPLES TAKEN  
AND THE RESULTS OF THE EXAMINATION.

Number of samples taken, ... ..	1,654
Number found to contain tubercle bacilli (including group and duplicate samples), ... ..	137*
Number found to contain other infectious organisms (including group samples),	181†
Number negative, ... ..	1,334

\*Taken from 124 cows.

†Taken from 174 cows.

TABLE III.

STATEMENT SHOWING THE NUMBER OF ANIMALS SLAUGHTERED UNDER  
THE TUBERCULOSIS ORDER OF 1925.

Tuberculosis of the Udder.			Giving Tuberculous Milk.			Tuberculous Emaciation.			Chronic Cough, &c.			Total.
Total No.	Found on Herd Inspection. No.	%	Total No.	Found on Herd Inspection. No.	%	Total No.	Found on Herd Inspection. No.	%	Total No.	Found on Herd Inspection. No.	%	
110	98	89.9	7	7	100	31	6	19.3	253	139	54.9	401

TABLE IV.

STATEMENT SHOWING THE NUMBER OF CASES, BOTH NEGATIVE AND  
POSITIVE, REPORTED UNDER THE TUBERCULOSIS ORDER, OR  
DETECTED DURING THE ROUTINE INSPECTION OF DAIRY HERDS.

Reported by						Detected by County Veterinary Inspector. Pos.	Totals.  Pos.
Owner.		Private Veterinary Surgeons.		Veterinary Inspectors of other Local Authorities.			
Pos.	Neg.	Pos.	Neg.	Pos.	Neg.		
126	103	22	11	3	1	250	401

Slaughtered by owner while under investigation, 11

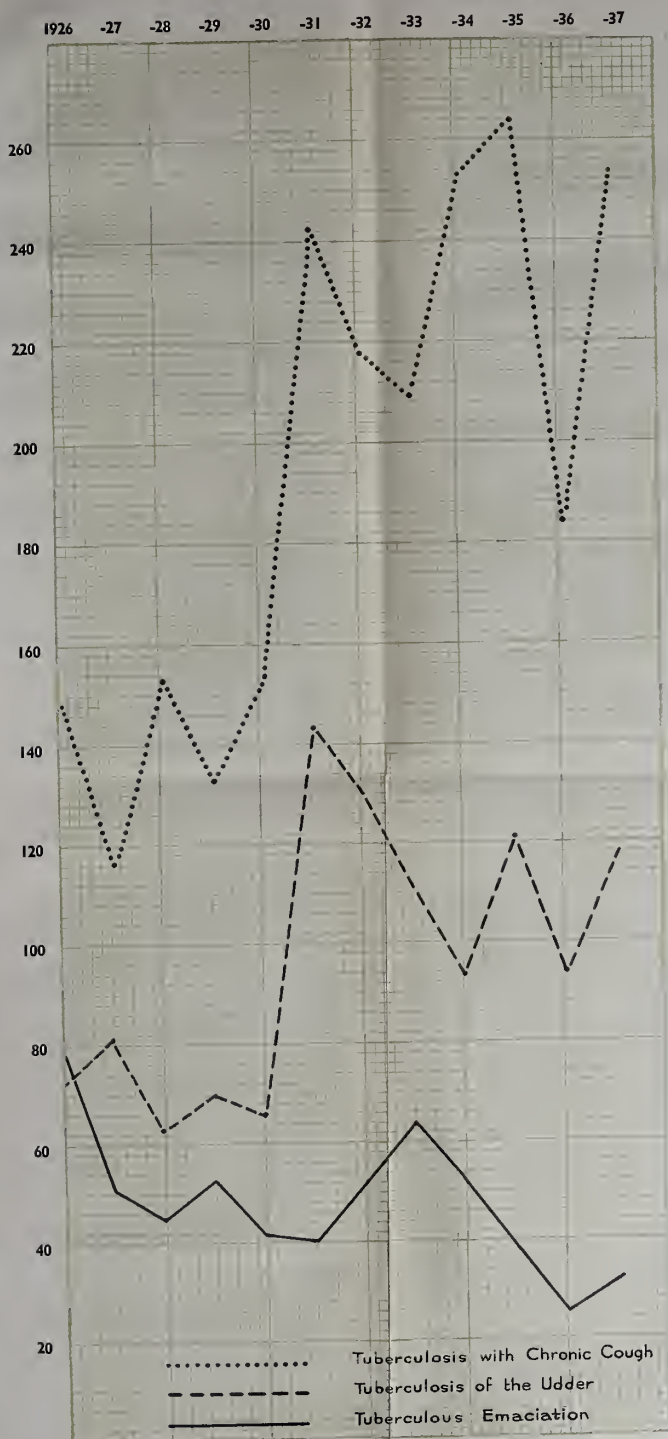
Died while under investigation, ... .. 2

TABLE V.

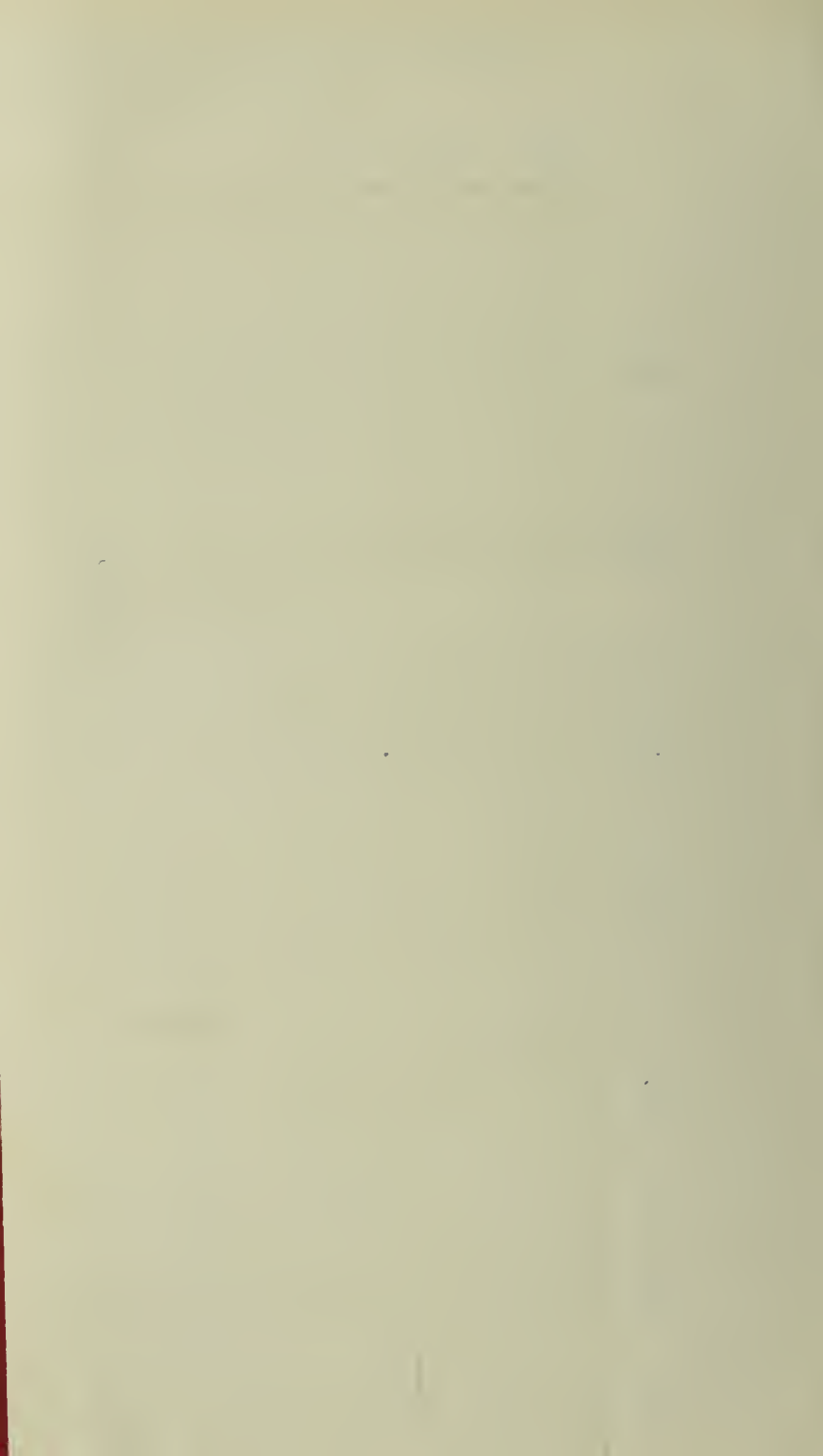
STATEMENT SHOWING RESULTS OF POST-MORTEM EXAMINATIONS OF  
ANIMALS SLAUGHTERED UNDER THE TUBERCULOSIS ORDER OF 1925.

	Tuberculosis of the Udder.	Giving Tuberculous Milk.	Tuberculous Emaciation.	Chronic Cough, &c.	Totals.	Approximate Average.
" Advanced,"	77	1	15	114	207	51.6%
" Not Advanced,"	56	4	13	115	188	46.9%
" Not Affected,"	—	—	—	—	6	1.5%
	133	5	28	229	401	

GRAPH SHOWING NUMBER OF CASES DEALT WITH UNDER  
THE TUBERCULOSIS ORDER SINCE 1926.







## BURGH OF BIGGAR.

(Area, 72 Acres).

# Report of the Medical Officer of Health, 1937.

## Statistics.

The **Population**, as estimated by the Registrar-General, amounted to 1,297.

The **Births** registered in the Burgh amounted to 18—males, 8; females, 10—giving a birth-rate of 13·9 per 1,000 of the population.

The **Deaths** registered during the year, after correction for transfer, numbered 18, giving a death-rate of 13·9 per 1,000 of the population. The deaths have been classified, according to cause and age periods, as follows :—

### (a) CAUSE OF DEATH.

<i>Zymotic Diseases—</i>					
Scarlet Fever,	...	...	...	...	1
<i>Malignant Diseases,</i>	...	...	...	...	2
<i>Nervous Diseases—</i>					
Cerebral Haemorrhage,	...	...	...	...	2
Other Nervous Diseases,	...	...	...	...	1
<i>Circulatory Diseases—</i>					
Heart Diseases,	...	...	...	...	6
Other Circulatory Diseases,	...	...	...	...	1
<i>Respiratory Diseases—</i>					
Bronchitis,	...	...	...	...	1
<i>Diseases of the Blood, etc.—</i>					
Pernicious Anaemia,	...	...	...	...	1
<i>Diseases of the Genito-Urinary System—</i>					
Nephritis,	...	...	...	...	1
<i>Other Defined Diseases,</i>	...	...	...	...	2
Total,					18

## (b) AGE PERIODS (YEARS).

1-5	15-25	45-55	55-65	65-75	75+	Total.
1	2	2	1	6	6	18

**Prevalence of Infectious Diseases.**

*Notifiable Diseases.*—In all, 12 cases of infectious diseases were notified:—Scarlet fever, 11; diphtheria, 1. Of these, 6 cases of scarlet fever and 1 of diphtheria were treated in hospital. Visits of inspection were made to the homes where the cases occurred, and disinfections carried out. All precautions to prevent the spread of the disease were taken.

**Tuberculosis.**

*Notification.*—During the year no tuberculosis was notified.

*Institutional Treatment.*—No cases received institutional treatment during the year.

*Domiciliary Treatment.*—No cases received extra nourishment during the year.

**Maternity and Child Welfare.**

*Notification of Births.*—Nineteen notifications were received, 18 live-births and 1 still-birth. The attendant at birth in each case was:—Doctor and midwife, 9; doctor and handywoman, 1; institution, 9.

*Puerperal Fever.*—No cases occurred during the year.

**Midwives (Scotland) Act, 1915.**

*Practising Midwives.*—There are no practising midwives in the Burgh.

**General Sanitation.**

*Water Supply.*—The supply was satisfactory and adequate.

*Drainage and Sewage Disposal.*—The new purification works are working satisfactorily.

*Housing.*—The eight new houses under construction to accommodate tenants from dwellings unfit for habitation were nearing completion at the close of the year.

*Milk and Dairies (Scotland) Act, 1914.*—There is one registered retail milk shop in the Burgh.

JOHN M. LANG,  
Medical Officer of Health.

**BURGH OF BIGGAR.**

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**SANITARY INSPECTOR'S REPORT FOR 1937**

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**Water Supply** for the Burgh of Biggar is obtained from King's Beck Burn, about seven miles south of Biggar. The Town Council inspected the dam and works in the month of July. The supply was sufficient for all purposes.

**Drainage and Sewage.**—The purification tanks and works, which are situated about one mile south-east of the Burgh, dealt with all the sewage satisfactorily.

**Scavenging System** is the same as formerly, the ashes being removed every second day, and all trade refuse burned at the Burgh coup which is situated about two miles north of the Burgh.

**Water-Closets.**—There are nine water-closets for two tenants and six water-closets each for three tenants.

There are no dry closets in the Burgh.

**Ashpits.**—There are no ashpits or middens in the Burgh.

**Nuisances.**—Several cases were dealt with during the year, but after the usual notice being given they were removed, no legal proceedings being necessary.

**The High Schools.**—The two schools were inspected frequently and always found to be kept in a clean condition.

**Cowkeepers and Milk Shops.**—There is one registered retail milk shop in the Burgh.

**Pigstyes.**—There are two pigstyes in the Burgh. Visits of inspection were frequent and the styes were found to be kept clean.

**Common Lodging-Houses.**—There are none in the Burgh.

**Burial Ground** is all within the Burgh and is kept in good order.

There are two properties (4 houses) without inside sinks and water supply.

**Housing.**—The eight new houses under construction to accommodate tenants from dwellings unfit for habitation were nearing completion at the close of the year.

**Workshops.**—There are no underground workshops in the Burgh. The following is a list of the workshops and the number of persons employed :—

Number of Employees.						
Workshops.	No. of Shops.	Males.	Females.	Apprentices.	Total.	
Dressmakers and Milliners,	10	9	17	—	26	
Tailors, ... ..	3	4	1	—	5	
Bakers, ... ..	4	12	9	4	25	
Cabinetmakers, ... ..	2	6	2	1	9	
Jewellers, ... ..	3	3	1	—	4	
Harnessmakers, ... ..	1	3	—	—	3	
Blacksmiths, ... ..	1	4	—	1	5	
Shoemakers, ... ..	6	8	—	—	8	
Engineers, ... ..	6	14	—	4	18	
Plumbers, ... ..	2	7	—	3	10	
Painters, ... ..	4	11	—	4	15	
Joiners, ... ..	3	12	—	3	15	
	45	93	30	20	143	

**Slaughterhouse.**—The slaughterhouse is situated outside the Burgh. It was inspected frequently and found to be kept clean

and in good order. The record of animals killed and the dues collected are as follows :—

Cattle.	Calves.	Swine.	Sheep.	Total.	Dues Collected.
589	161	370	61,923	63,043	£642 5s. 0d.

Record of Inspections Made.						No. of Inspections.
High Schools,	...	...	...	...	...	10
Workshops,	...	...	...	...	...	12
Pigstyes,	...	...	...	...	...	7
Fish Shops,	...	...	...	...	...	13
Slaughterhouse,	...	...	...	...	...	10
						—
						52
						—

WILLIAM M. SMITH,  
*Sanitary Inspector.*



## BURGH OF LANARK.

(Area, 507 Acres).

## Report by the Medical Officer of Health

1937.

## Statistics.

The **Population**, as estimated by the Registrar-General was 6,082.

**Births.**—The number of births registered in the Burgh during the year was 95, an increase of 9 from last year—males, 49 ; females, 46—giving a birth-rate of 15·6 per 1,000 of the population.

**Mortality.**—The deaths registered during the year, after correction for transfers, numbered 86, giving a death-rate from all causes of 14·14 per 1,000 of the population. The deaths of infants under 1 year numbered 8, giving an infant mortality rate of 84·21 per 1,000 births. The deaths have been classified according to cause and age periods, as follows :—

## (a) CAUSE OF DEATH.

*Infectious and Parasitic Diseases—*

Influenza,	...	...	...	...	...	1
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*Tuberculosis—*

Pulmonary,	...	...	...	...	...	3
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Abdominal,	...	...	...	...	...	1
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<i>Malignant Diseases,</i>	...	...	...	...	...	7
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*Nervous Diseases—*

Cerebral Haemorrhage,	...	...	...	...	15
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Other Nervous Diseases,	...	...	...	...	2
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*Circulatory Diseases—*

Heart Diseases,	...	...	...	...	12
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Other Circulatory Diseases,	...	...	...	...	1
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*Respiratory Diseases—*

Bronchitis, ... ..	1
Pneumonia, ... ..	2
Other Respiratory Diseases, ... ..	1

*Diseases of Nutrition, etc.—*

Diabetes, ... ..	1
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<i>Diseases of Ductless Glands,</i> ... ..	1
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<i>Diseases of Digestive System,</i> ... ..	5
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*Diseases of Genito-Urinary System—*

Nephritis, ... ..	4
Others, ... ..	1

*Diseases of Early Infancy—*

Congenital Hydrocephalus, ... ..	1
Premature Birth, ... ..	4
Marasmus, ... ..	2

*Violence—*

Accidental Violence, ... ..	3
Suicide, ... ..	1

*Other Defined Diseases—*

Old Age, ... ..	17
<b>Total,</b> ... ..	<b>86</b>

## (b) AGE PERIODS (YEARS).

—1	1-5	10-15	15-25	25-35	35-45	45-55	55-65	65-75	75+	Total.
8	1	1	1	3	2	6	15	13	36	86

**Prevalence of Infectious Diseases.**

The number of cases of infectious diseases notified during the year was 26. The various diseases notified were :—Scarlet fever, 3 ; diphtheria, 10 ; typhoid fever, 3 ; erysipelas, 2 ; ophthalmia neonatorum, 1 ; primary pneumonia, 4 ; influenzal pneumonia, 2 ; cerebro-spinal fever, 1.

*Hospital Admissions.*—The following cases were admitted to hospital :—Scarlet fever, 3 ; diphtheria, 10 ; typhoid fever, 3 ; primary pneumonia, 3 ; influenzal pneumonia, 1 ; cerebro-spinal fever, 1.

### **Tuberculosis.**

*Notifications.*—During the year 11 notifications of the disease were received, 5 being of the pulmonary and 6 of the non-pulmonary type.

*Institutional Treatment.*—Six cases received institutional treatment—5 pulmonary and 1 non-pulmonary.

*Domiciliary Treatment.*—Four cases received extra nourishment during the year.

### **Maternity and Child Welfare.**

*Notifications and Attendances at Confinements.*—Ninety-eight notifications were received, 94 being live-births. From the information received it was found that in 36 cases a doctor was in attendance, in 12 cases a doctor and midwife, in 7 cases a doctor and handywoman, in 6 cases a certified midwife, in 1 case a handywoman; and 2 cases were born before the arrival of an attendant. Thirty-four cases were confined in hospital.

*Maternal Mortality.*—No deaths.

*Puerperal Pyrexia.*—No cases.

*Ophthalmia Neonatorum.*—One case occurred during the year.

*Hospital Admissions.*—Ten cases were admitted to the County Maternity Hospital, Bellshill, and 8 cases to the County Hospital, Lanark.

*Ear, Throat and Nose Ailments.*—One child was admitted to the County Convalescent Home, Calderbank House, for the removal of foreign body from nose.

### **Midwives (Scotland) Act, 1915.**

*Practising Midwives.*—Two certified midwives notified their intention to practise.

*Inspection of Midwives.*—Eight routine inspections were carried out during the year and 7 special visits. Records were kept in a satisfactory manner.

### General Sanitation.

*Water Supply.*—The water supply was satisfactory and adequate, there being an arrangement with the Burgh of Motherwell and Wishaw whereby additional water can be fed into the Burgh mains during a prolonged period of drought. Arrangements have also been made for a supplementary supply from the County Council reservoir at Camps, but this supply is not yet available.

*Drainage and Sewage Disposal.*—An application has been made to the Commissioner for Special Areas for a grant towards reconstructing the Sewage Purification Works. The present works cannot be considered satisfactory, although there have been no complaints during the year.

*Housing.*—No houses were provided under the Slum Clearance Scheme during the year, but tenders were received for the erection of 124 houses under the Decrowding Scheme. When land has been acquired a further 82 houses will be provided.

JOHN M. LANG,  
*Medical Officer of Health.*







